

ASPEN AEROGELS INC

FORM 8-K (Current report filing)

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of Earliest Event Reported): September 3, 2014

Aspen Aerogels, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-36481
(Commission
File Number)

04-3559972
(I.R.S. Employer
Identification No.)

**30 Forbes Road, Building B,
Northborough, Massachusetts**
(Address of principal executive offices)

01532
(Zip Code)

Registrant's telephone number, including area code: (508) 691-1111

Not Applicable
Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 1.01 Entry into a Material Definitive Agreement.

On September 3, 2014, Aspen Aerogels, Inc. (the “Company”) entered into an Amended and Restated Loan and Security Agreement with Silicon Valley Bank (the “Lender”), effective August 31, 2014 (the “Credit Facility”). Under the Credit Facility, the Lender agreed to increase the maximum amount the Company is permitted to borrow, subject to continued covenant compliance and borrowing base requirements, from \$10 million to \$20 million and to extend the maturity date to August 31, 2016. The funds available at any time are limited to the eligible borrowing base comprised of certain accounts receivable and inventory. As of August 31, 2014, there was no outstanding balance under the Credit Facility. Outstanding letters of credit in the amount of \$1.5 million are backed by the Credit Facility and reduce the funds otherwise available to the Company.

At the Company’s election, the interest rates applicable to borrowings under the Credit Facility may be based on LIBOR or Prime Rate. Prime Rate-based interest rates vary from Prime Rate plus 0.75% per annum to Prime Rate plus 1.75% per annum, while LIBOR-based rates vary from LIBOR plus 3.75% per annum to LIBOR plus 4.25% per annum. In addition, the Company paid a commitment fee of \$100,000 upon closing and will pay a facility fee of 0.5% per annum on the average unused portion of the Credit Facility.

The Credit Facility contains customary representations and warranties and customary affirmative and negative covenants, including, among others, covenants that limit or restrict the Company’s ability to incur indebtedness, grant liens, merge or consolidate, dispose of assets, make investments, make acquisitions, enter into certain transactions with affiliates, pay dividends or make distributions, or repurchase stock, in each case subject to customary exceptions for a loan facility of this size and type. In addition, the Credit Facility contains customary events of default that entitles the Lender to cause any or all of the Company’s indebtedness under the Credit Facility to become immediately due and payable. The events of default include, among others, non-payment, inaccuracy of representations and warranties, covenant defaults, the occurrence of a material adverse effect (as defined in the Credit Facility), cross-default to material agreements, cross-default to material indebtedness, bankruptcy and insolvency, material judgment defaults and change of control default. In addition, the Company is required to comply with financial covenants relating to EBITDA (as defined in the Credit Facility) during the term of the Credit Facility and has agreed to limit unfinanced capital expenditures at specified levels during the term of the Credit Facility.

The Company’s obligations under the Credit Facility are secured by all assets of the Company and its Rhode Island subsidiary, except for certain exclusions. The Company may terminate the Credit Facility at any time without an obligation to pay a termination fee. The foregoing description of the Credit Facility is only a summary of its material terms and does not purport to be complete. This summary is qualified in its entirety by reference to the full text of the Credit Facility, a copy of which is attached hereto as Exhibit 10.1 and is incorporated herein by reference.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information set forth in Item 1.01 of this Current Report on Form 8-K that relates to the creation of a direct financial obligation of the Company is incorporated by reference into this Item 2.03.

Item 8.01 Other Events.

On August 31, 2014, pursuant to the Company's Restated Bylaws, the Board of Directors of the Company fixed the number of directors of the Company to eight, eliminating the vacancy created by the resignation of David Prend as a director of the Company as previously reported.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

10.1 Amended and Restated Loan and Security Agreement, dated September 3, 2014 and effective as of August 31, 2014, by and between the Company and Silicon Valley Bank.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: September 8, 2014

Aspen Aerogels, Inc.

By: /s/ John F. Fairbanks

Name: John F. Fairbanks

Title: Vice President, Chief Financial Officer and Treasurer

**AMENDED AND RESTATED
LOAN AND SECURITY AGREEMENT**

THIS LOAN AND SECURITY AGREEMENT (this “**Agreement**”) dated as of September 3, 2014, effective as of August 31, 2014 (the “**Effective Date**”) between **SILICON VALLEY BANK**, a California corporation (“**Bank**”), and **ASPEN AEROGELS, INC.**, a Delaware corporation (“**Borrower**”), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. This Agreement amends and restates in its entirety that certain Loan and Security Agreement dated as of March 31, 2011 between Borrower and Bank (as amended from time to time, the “**Prior Loan Agreement**”). The parties agree as follows:

1 ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein.

2 LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.2 Credit Extensions

2.2.1 Revolving Advances.

(a) Availability. Subject to the terms and conditions of this Agreement and to deduction of Reserves, Bank shall make Advances not exceeding the Availability Amount. Amounts borrowed under the Revolving Line may be repaid and, prior to the Revolving Line Maturity Date, reborrowed, subject to the applicable terms and conditions precedent herein.

(b) Termination; Repayment. The Revolving Line terminates on the Revolving Line Maturity Date, when the principal amount of all Advances, the unpaid interest thereon, and all other Obligations relating to the Revolving Line shall be immediately due and payable.

2.2.2 Letters of Credit Sublimit.

(a) As part of the Revolving Line and subject to deduction of Reserves, Bank shall issue or have issued Letters of Credit denominated in Dollars or a Foreign Currency for Borrower’s account. The aggregate undrawn Dollar Equivalent of the face amount of outstanding Letters of Credit (plus the drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) shall at all times reduce the amount otherwise available for Advances under the Revolving Line. The aggregate undrawn Dollar Equivalent of the face amount of

outstanding Letters of Credit (plus the drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) may not exceed the lesser of (A) (i) Five Million Dollars (\$5,000,000), minus (ii) the sum of all amounts used for Cash Management Services, minus (iii) the FX Reduction Amount, or (B) (i) the lesser of (I) the Revolving Line or (II) the Borrowing Base, minus (ii) the sum of all outstanding principal amounts of any Advances (including any amounts used for Cash Management Services), minus (iii) the FX Reduction Amount.

(b) If, on the Revolving Line Maturity Date (or the effective date of any termination of this Agreement), there are any outstanding Letters of Credit, then on such date Borrower shall provide to Bank cash collateral in an amount equal to the sum of (i) 105% of the Dollar Equivalent of the undrawn face amount of all such Letters of Credit plus (ii) 100% of all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment), to secure all of the Obligations relating to such Letters of Credit. All Letters of Credit shall be in form and substance acceptable to Bank in its sole discretion and shall be subject to the terms and conditions of Bank's standard Application and Letter of Credit Agreement (the "**Letter of Credit Application**"). Borrower agrees to execute any further documentation in connection with the Letters of Credit as Bank may reasonably request. Borrower further agrees to be bound by the regulations and interpretations of the issuer of any Letters of Credit guaranteed by Bank and opened for Borrower's account or by Bank's interpretations of any Letter of Credit issued by Bank for Borrower's account, and Borrower understands and agrees that Bank shall not be liable for any error, negligence, or mistake, whether of omission or commission, in following Borrower's instructions or those contained in the Letters of Credit or any modifications, amendments, or supplements thereto.

(c) The obligation of Borrower to immediately reimburse Bank for drawings made under Letters of Credit shall be absolute, unconditional, and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement, such Letters of Credit, and the Letter of Credit Application.

(d) Borrower may request that Bank issue a Letter of Credit payable in a Foreign Currency. If a demand for payment is made under any such Letter of Credit, Bank shall treat such demand as an Advance to Borrower of the Dollar Equivalent of the amount thereof (plus fees and charges in connection therewith such as wire, cable, SWIFT or similar charges).

(e) To guard against fluctuations in currency exchange rates, upon the issuance of any Letter of Credit payable in a Foreign Currency, Bank shall create a reserve (the "**Letter of Credit Reserve**") under the Revolving Line in an amount equal to ten percent (10%) of the Dollar Equivalent of the undrawn face amount of such Letter of Credit. The amount of the Letter of Credit Reserve may be adjusted by Bank from time to time to account for fluctuations in the exchange rate. The availability of funds under the Revolving Line shall be reduced by the amount of such Letter of Credit Reserve for as long as such Letter of Credit remains outstanding.

2.2.3 Foreign Exchange Sublimit. As part of the Revolving Line and subject to the deduction of Reserves, Borrower may enter into foreign exchange contracts with Bank under which Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency (each, a "**FX Contract**") on a specified date (the "**Settlement Date**"). FX Contracts shall have a Settlement Date of at least one (1) FX Business Day after the contract date. The

aggregate amount of FX Contracts at any one time may not exceed ten (10) times the lesser of (A) (i) Five Million Dollars (\$5,000,000), minus (ii) the sum of all amounts used for Cash Management Services, minus (iii) the aggregate Dollar Equivalent of the undrawn face amount of any outstanding Letters of Credit (plus drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), or (B) (i) the lesser of (I) the Revolving Line or (II) the Borrowing Base, minus (ii) the sum of all outstanding principal amounts of any Advances (plus any amounts used for Cash Management Services), minus (iii) the aggregate Dollar Equivalent of the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve). The amount otherwise available for Credit Extensions under the Revolving Line shall be reduced by an amount equal to ten percent (10%) of each outstanding FX Contract (the “**FX Reduction Amount**”). Any amounts needed to fully reimburse Bank for any amounts not paid by Borrower in connection with FX Contracts will be treated as Advances under the Revolving Line and will accrue interest at the interest rate applicable to Advances.

2.2.4 Cash Management Services Sublimit. Borrower may use the Revolving Line for Bank’s cash management services, which may include merchant services, direct deposit of payroll, business credit card, and check cashing services identified in Bank’s various cash management services agreements (collectively, the “**Cash Management Services**”), in an aggregate amount not to exceed the lesser of (A) (i) Five Million Dollars (\$5,000,000), minus (ii) the aggregate Dollar Equivalent of the undrawn face amount of any outstanding Letters of Credit (plus drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), minus (iii) the FX Reduction Amount, or (B) (i) the lesser of (I) the Revolving Line or (II) the Borrowing Base, minus (ii) the sum of all outstanding principal amounts of any Advances, minus (iii) the aggregate Dollar Equivalent of the undrawn face amount of any outstanding Letters of Credit (plus drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), minus (iv) the FX Reduction Amount. Any amounts Bank pays on behalf of Borrower for any Cash Management Services will be treated as Advances under the Revolving Line and will accrue interest at the interest rate applicable to Advances.

2.3 Overadvances . If, at any time, the sum of (a) the outstanding principal amount of any Advances (including any amounts used for Cash Management Services), plus (b) the undrawn face amount of any outstanding Letters of Credit (plus drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), plus (c) the FX Reduction Amount exceeds the lesser of either the Revolving Line or the Borrowing Base (such excess amount being an “**Overadvance**”), Borrower shall immediately pay to Bank in cash such Overadvance. Without limiting Borrower’s obligation to repay Bank any amount of the Overadvance, Borrower agrees to pay Bank interest on the outstanding amount of any Overadvance, on demand, at the Default Rate.

2.4 Payment of Interest on the Credit Extensions .

(a) Interest; Payment. Each Advance shall bear interest on the outstanding principal amount thereof from the date when made, continued or converted until paid in full at a rate per annum equal to (i) for Prime Rate Advances, the Prime Rate plus the applicable Prime Rate Margin, and (ii) during a Streamline Period, for LIBOR Advances, the LIBOR Rate plus the applicable LIBOR Rate Margin. On and after the expiration of any Interest Period applicable to

any LIBOR Advance outstanding on the date of the occurrence of an Event of Default or acceleration of the Obligations, the amount of such LIBOR Advance shall, during the continuance of such Event of Default, at the Bank's option, bear interest at the Default Rate, unless Bank otherwise elects from time to time in its sole discretion to impose a smaller increase. Pursuant to the terms hereof, interest on each Advance shall be paid in arrears on each Interest Payment Date. On and after the expiration of any Interest Period applicable to any LIBOR Advance outstanding on the date when Borrower fails to maintain the Streamline Threshold and a Streamline Period is no longer in effect, at the Bank's option, the amount of such LIBOR Advance shall bear interest at the Prime Rate plus the applicable Prime Rate Margin. Interest shall also be paid on the date of any prepayment of any Advance pursuant to this Agreement for the portion of any Advance so prepaid and upon payment (including prepayment) in full thereof. All accrued but unpaid interest on the Advances shall be due and payable on the Revolving Line Maturity Date. Notwithstanding anything to the contrary contained herein, LIBOR Advances shall only be available to Borrower during a Streamline Period.

(b) Prime Rate Advances. Each change in the interest rate of the Prime Rate Advances based on changes in the Prime Rate shall be effective on the effective date of such change and to the extent of such change.

(c) LIBOR Advances. The interest rate applicable to each LIBOR Advance shall be determined in accordance with Section 3.4(a) hereunder. Subject to Sections 3.5 and 3.6, such rate shall apply during the entire Interest Period applicable to such LIBOR Advance, and interest calculated thereon shall be payable on the Interest Payment Date applicable to such LIBOR Advance.

(d) Computation of Interest. Any interest hereunder will accrue from day to day and is calculated on the basis of the actual number of days elapsed and a year of 360 days. In computing interest on any Credit Extension, the date of the making of such Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

(e) Default Rate. Except as otherwise provided in Section 2.4(a), upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is five percentage points (5.0%) above the rate that would otherwise be applicable thereto (the "**Default Rate**") unless Bank otherwise elects from time to time in its sole discretion to impose a smaller increase. Payment or acceptance of the increased interest provided in this Section 2.4(e) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

2.5 Fees. Borrower shall pay to Bank:

(a) Commitment Fee. A fully earned, non-refundable commitment fee of One Hundred Thousand Dollars (\$100,000), on the Effective Date;

(b) [Intentionally deleted.]

(c) Unused Revolving Line Facility Fee. Payable monthly in arrears on the last day of the month following the Effective Date, on the last day of each month occurring thereafter prior to the Revolving Line Maturity Date, and on the Revolving Line Maturity Date, a fee (the "Unused Revolving Line Facility Fee") in an amount equal to one-half of one percent (0.50%) per annum of the average unused portion of the Revolving Line, as determined by Bank. The unused portion of the Revolving Line, for purposes of this calculation, shall be calculated on a calendar year basis and shall equal the difference between (i) the Revolving Line, and (ii) the average for the period of the daily closing balance of the Revolving Line outstanding;

(d) Letter of Credit Fee. Bank's customary fees and expenses for the issuance or renewal of Letters of Credit, including, without limitation, a letter of credit fee of two percent (2.00%) per annum of the Dollar Equivalent of the face amount of each Letter of Credit issued, upon the issuance of such Letter of Credit, each anniversary of the issuance during the term of such Letter of Credit, and upon the renewal of such Letter of Credit by Bank; and

(e) Bank Expenses. All Bank Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due (or, if no stated due date, upon demand by Bank).

(f) Fees Fully Earned. Unless otherwise provided in this Agreement or in a separate writing by Bank, Borrower shall not be entitled to any credit, rebate, or repayment of any fees earned by Bank pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Bank's obligation to make loans and advances hereunder. Bank may deduct amounts owing by Borrower under the clauses of this Section 2.5 pursuant to the terms of Section 2.6(c). Bank shall provide Borrower written notice of deductions made from the Designated Deposit Account pursuant to the terms of the clauses of this Section 2.5.

2.6 Payments; Application of Payments; Debit of Accounts .

(a) All payments (including prepayments) to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff or counterclaim, before 12:00 p.m. Eastern time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Subject to Section 6.3(c), Bank shall apply the whole or any part of collected funds against the Revolving Line, or credit such collected funds to a Deposit Account of Borrower at Bank or an Affiliate of Bank, the order and method of such application to be in the sole discretion of Bank. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

(c) Bank may debit any of Borrower's deposit accounts, including the Designated Deposit Account, but excluding any Excluded Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due. These debits shall not constitute a set-off.

2.7 Withholding. Payments received by Bank from Borrower under this Agreement will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority (including any interest, additions to tax or penalties applicable thereto). Specifically, however, if at any time any Governmental Authority, applicable law, regulation or international agreement requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to Bank, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Bank receives a net sum equal to the sum which it would have received had no withholding or deduction been required, and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Authority. Borrower will, upon request, furnish Bank with proof reasonably satisfactory to Bank indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. The agreements and obligations of Borrower contained in this Section 2.7 shall survive the termination of this Agreement.

3 CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension . Bank's obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance reasonably satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

- (a) duly executed signatures to the Loan Documents (which may be photocopies, provided that originals shall be delivered to Bank within two (2) Business Days of the Effective Date);
- (b) the Operating Documents and long-form good standing certificates of Borrower certified by the Secretary of State (or equivalent agency) of Borrower's and each Guarantors' jurisdiction of organization or formation and each jurisdiction in which Borrower and each Guarantor is qualified to conduct business, each as of a date no earlier than thirty (30) days prior to the Effective Date;
- (c) certified copies of the Borrowing Resolutions for Borrower (which may be photocopies, provided that originals shall be delivered to Bank within two (2) Business Days of the Effective Date);
- (d) a payoff letter from PJC Capital LLC;

(e) evidence satisfactory to Bank that all Indebtedness owed by Borrower under that certain Export-Import Bank Loan and Security Agreement dated as of March 31, 2011 has been repaid in full concurrently with the initial Credit Extension;

(f) certified copies, dated as of a recent date, of financing statement searches, as Bank may request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(g) the duly executed Perfection Certificates of Borrower and Guarantor;

(h) a legal opinion of Borrower's and Guarantor's counsel, in form and substance acceptable to Bank in its reasonable discretion, dated as of the Effective Date (which may be photocopies, provided that originals shall be delivered to Bank within two (2) Business Days of the Effective Date);

(i) the duly executed signatures to a Secretary's Certificate for Borrower and Guarantor (which may be photocopies, provided that originals shall be delivered to Bank within two (2) Business Days of the Effective Date);

(j) evidence satisfactory to Bank that the insurance policies and endorsements required by Section 6.7 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses and cancellation notice to Bank (or endorsements reflecting same) in favor of Bank; and

(k) payment of the fees and Bank Expenses then due as specified in Section 2.5 hereof.

3.2 Conditions Precedent to all Credit Extensions . Bank's obligation to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) except as otherwise provided in Section 3.4(a), timely receipt of an executed Transaction Report;

(b) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date of the Transaction Report and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Default or Event of Default shall have occurred and be continuing or immediately result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(c) in Bank's sole discretion, there has not been a Material Adverse Change since December 31, 2013.

3.3 Covenant to Deliver . Borrower agrees to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

3.4 Procedures for Borrowing .

(a) Subject to the prior satisfaction of all other applicable conditions to the making of an Advance set forth in this Agreement, an Advance shall be made upon Borrower's irrevocable written notice delivered to Bank by electronic mail in the form of a Notice of Borrowing executed by an Authorized Signer or without instructions if any Advances is necessary to meet Obligations which have become due, and such Notice of Borrowing shall indicate whether Borrower is requesting an Advance with respect to Eligible Accounts, Eligible Foreign Accounts or Eligible Inventory, as applicable. Such Notice of Borrowing must be received by Bank prior to 12:00 p.m. Eastern time, (i) at least three (3) Business Days prior to the requested Funding Date, in the case of any LIBOR Advance, and (ii) on the requested Funding Date, in the case of a Prime Rate Advance, specifying: (1) the amount of the Advance; (2) the Currency in which such Advance shall be denominated; (3) the requested Funding Date; (4) whether the Advance is to be comprised of LIBOR Advances or Prime Rate Advances; and (5) the duration of the Interest Period applicable to any such LIBOR Advances included in such notice; provided that if the Notice of Borrowing shall fail to specify the duration of the Interest Period for any Advance comprised of LIBOR Advances, such Interest Period shall be one (1) month. In addition to such Notice of Borrowing, Borrower must promptly deliver to Bank by electronic mail (i) during a Streamline Period, a completed Transaction Report executed by an Authorized Signer and (ii) when a Streamline Period is not in effect, a completed Transaction Report executed by an Authorized Signer together with such other reports and information, including without limitation, sales journals, cash receipts journals, accounts receivable aging reports, as Bank may request in its sole discretion.

(b) On the Funding Date, Bank shall credit proceeds of an Advance to the Designated Deposit Account denominated in the same Currency as the Currency requested with respect to the Advance and, subsequently, shall transfer such proceeds by wire transfer to such other account as Borrower may instruct in the Notice of Borrowing. No Advances shall be deemed made to Borrower, and no interest shall accrue on any such Advance, until the related funds have been deposited in the applicable Designated Deposit Account.

3.5 Conversion and Continuation Elections .

(a) So long as (i) no Event of Default exists; (ii) Borrower shall not have sent any notice of termination of this Agreement; and (iii) Borrower shall have complied with such customary procedures as Bank has established from time to time for Borrower's requests for LIBOR Advances, Borrower may, upon irrevocable written notice to Bank:

- (1) elect to convert on any Business Day, Prime Rate Advances into LIBOR Advances;
- (2) elect to continue on any Interest Payment Date any LIBOR Advances maturing on such Interest Payment Date; or
- (3) elect to convert on any Interest Payment Date any LIBOR Advances maturing on such Interest Payment Date into Prime Rate Advances (provided that clauses (i), (ii) and (iii) above shall not apply to this clause (3)).

(b) Borrower shall deliver a Notice of Conversion/Continuation by electronic mail to be received by Bank prior to 12:00 p.m. Eastern time (i) at least three (3) Business Days in advance of the Conversion Date or Continuation Date, if any Advances are to be converted into or continued as LIBOR Advances; and (ii) on the Conversion Date, if any Advances are to be converted into Prime Rate Advances, in each case specifying the:

- (1) proposed Conversion Date or Continuation Date;
- (2) aggregate amount of the Advances to be converted or continued;
- (3) nature of the proposed conversion or continuation; and
- (4) if the resulting Advance is to be a LIBOR Advance, the duration of the requested Interest Period.

(c) If upon the expiration of any Interest Period applicable to any LIBOR Advances, Borrower shall have timely failed to select a new Interest Period to be applicable to such LIBOR Advances or request to convert a LIBOR Advance into a Prime Rate Advance, Borrower shall be deemed to have elected to convert such LIBOR Advances into Prime Rate Advances.

(d) Any LIBOR Advances shall, at Bank's option, convert into Prime Rate Advances in the event that (i) Borrower fails to maintain the Streamline Threshold and a Streamline Period is no longer in effect, (ii) an Event of Default exists, or (iii) the aggregate principal amount of the Prime Rate Advances which have been previously converted to LIBOR Advances, or the aggregate principal amount of existing LIBOR Advances continued, as the case may be, at the beginning of an Interest Period shall at any time during such Interest Period exceed the lesser of the Revolving Line or the Borrowing Base. Borrower agrees to pay Bank, upon demand by Bank (or Bank may, at its option, debit the Designated Deposit Account or any other account Borrower maintains with Bank, other than an Excluded Account) any amounts required to compensate Bank for any loss (including loss of anticipated profits), cost, or expense incurred by Bank, as a result of the conversion of LIBOR Advances to Prime Rate Advances pursuant to this Section 3.5(d).

(e) Notwithstanding anything to the contrary contained herein, Bank shall not be required to purchase Dollar deposits in the London interbank market or other applicable LIBOR market to fund any LIBOR Advances, but the provisions hereof shall be deemed to apply as if Bank had purchased such deposits to fund the LIBOR Advances.

3.6 Special Provisions Governing LIBOR Advances . Notwithstanding any other provision of this Agreement to the contrary, the following provisions shall govern with respect to LIBOR Advances as to the matters covered:

(a) Determination of Applicable Interest Rate . As soon as practicable on each Interest Rate Determination Date, Bank shall determine (which determination shall, absent manifest error in calculation, be final, conclusive and binding upon all parties) the interest rate that shall apply to the LIBOR Advances for which an interest rate is then being determined for the applicable Interest Period and shall promptly give notice thereof (in writing or by telephone confirmed in writing) to Borrower.

(b) Inability to Determine Applicable Interest Rate . In the event that Bank shall have determined (which determination shall be final and conclusive and binding upon all parties hereto), on any Interest Rate Determination Date with respect to any LIBOR Advance, that by reason of circumstances affecting the London interbank market adequate and fair means do not exist for ascertaining the interest rate applicable to such LIBOR Advance on the basis provided for in the definition of LIBOR, Bank shall on such date give notice (by facsimile or by telephone confirmed in writing) to Borrower of such determination, whereupon (i) no Advances may be made as, or converted to, LIBOR Advances until such time as Bank notifies Borrower that the circumstances giving rise to such notice no longer exist, and (ii) any Notice of Borrowing or Notice of Conversion/Continuation given by Borrower with respect to LIBOR Advances in respect of which such determination was made shall be deemed to be rescinded by Borrower.

(c) Compensation for Breakage or Non-Commencement of Interest Periods . If (i) for any reason, other than a default by Bank or any failure of Bank to fund LIBOR Advances due to impracticability or illegality under Sections 3.7(c) and 3.7(d) of this Agreement, a borrowing or a conversion to or continuation of any LIBOR Advance does not occur on a date specified in a Notice of Borrowing or a Notice of Conversion/Continuation, as the case may be, or (ii) any complete or partial principal payment or reduction of a LIBOR Advance, or any conversion of any LIBOR Advance, occurs on a date prior to the last day of an Interest Period applicable to that LIBOR Advance, including due to voluntary or mandatory prepayment or acceleration or Borrower fails to maintain the Streamline Threshold and a Streamline Period is no longer in effect, then, in each case, Borrower shall compensate Bank, upon written request by Bank, for all losses and expenses incurred by Bank in an amount equal to the excess, if any, of:

(A) the amount of interest that would have accrued on the amount (1) not borrowed, converted or continued as provided in clause (i) above, or (2) paid, reduced or converted as provided in clause (ii) above, for the period from (y) the date of such failure to borrow, convert or continue as provided in clause (i) above, or the date of such payment, reduction or conversion as provided in clause (ii) above, as the case may

be, to (z) in the case of a failure to borrow, convert or continue as provided in clause (i) above, the last day of the Interest Period that would have commenced on the date of such borrowing, conversion or continuing but for such failure, and in the case of a payment, reduction or conversion prior to the last day of an Interest Period applicable to a LIBOR Advance as provided in clause (ii) above, the last day of such Interest Period, in each case at the applicable rate of interest or other return for such LIBOR Advance(s) provided for herein (excluding, however, the LIBOR Rate Margin included therein, if any), over

(B) the interest which would have accrued to Bank on the applicable amount provided in clause (A) above through the purchase of a Eurodollar deposit bearing interest at the rate obtained pursuant to the definition of LIBOR Rate on the date of such failure to borrow, convert or continue as provided in clause (i) above, or the date of such payment, reduction or conversion as provided in clause (ii) above, as the case may be, for a period equal to the remaining period of such applicable Interest Period provided in clause (A) above.

Bank's request shall set forth the manner and method of computing such compensation and such determination as to such compensation shall be conclusive absent manifest error.

(d) Assumptions Concerning Funding of LIBOR Advances. Calculation of all amounts payable to Bank under this Section 3.6 and under Section 3.7 shall be made as though Bank had actually funded each relevant LIBOR Advance through the purchase of a Eurodollar deposit bearing interest at the rate obtained pursuant to the definition of LIBOR Rate in an amount equal to the amount of such LIBOR Advance and having a maturity comparable to the relevant Interest Period; provided, however, that Bank may fund each of its LIBOR Advances in any manner it sees fit and the foregoing assumptions shall be utilized only for the purposes of calculating amounts payable under this Section 3.6 and under Section 3.7.

(e) LIBOR Advances After Default. After the occurrence and during the continuance of an Event of Default, at the Bank's option, (i) Borrower may not elect to have an Advance be made or continued as, or converted to, a LIBOR Advance after the expiration of any Interest Period then in effect for such Advance and (ii) subject to the provisions of Section 3.6(c), any Notice of Conversion/Continuation given by Borrower with respect to a requested conversion/continuation that has not yet occurred shall be deemed to be rescinded by Borrower and be deemed a request to convert or continue Advances referred to therein as Prime Rate Advances.

3.7 Additional Requirements/Provisions Regarding LIBOR Advances .

(a) Borrower shall pay Bank, upon demand by Bank, from time to time such amounts as Bank may determine to be necessary to compensate it for any costs incurred by Bank that Bank determines are attributable to its making or maintaining of any amount receivable by Bank hereunder in respect of any LIBOR Advances relating thereto (such increases in costs and

reductions in amounts receivable being herein called “ **Additional Costs** ”), in each case resulting from any Regulatory Change which:

(i) changes the basis of taxation of any amounts payable to Bank under this Agreement in respect of any LIBOR Advances (other than changes which affect taxes measured by or imposed on the overall net income of Bank by the jurisdiction in which Bank has its principal office);

(ii) imposes or modifies any reserve, special deposit or similar requirements relating to any extensions of credit or other assets of, or any deposits with, or other liabilities of Bank (including any LIBOR Advances or any deposits referred to in the definition of LIBOR); or

(iii) imposes any other condition affecting this Agreement (or any of such extensions of credit or liabilities).

Bank will notify Borrower of any event occurring after the Effective Date which will entitle Bank to compensation pursuant to this Section 3.7(a) as promptly as practicable after it obtains knowledge thereof and determines to request such compensation. Bank will furnish Borrower with a statement setting forth the basis and amount of each request by Bank for compensation under this Section 3.7(a). Determinations and allocations by Bank for purposes of this Section 3.7(a) of the effect of any Regulatory Change on its costs of maintaining its obligations to make LIBOR Advances, of making or maintaining LIBOR Advances, or on amounts receivable by it in respect of LIBOR Advances, and of the additional amounts required to compensate Bank in respect of any Additional Costs, shall be conclusive absent manifest error.

(b) If Bank shall determine that the adoption or implementation of any applicable law, rule, regulation, or treaty regarding capital adequacy, or any change therein, or any change in the interpretation or administration thereof by any governmental authority, central bank, or comparable agency charged with the interpretation or administration thereof, or compliance by Bank (or its applicable lending office) with any request or directive regarding capital adequacy (whether or not having the force of law) of any such authority, central bank, or comparable agency, has or would have the effect of reducing the rate of return on capital of Bank or any person or entity controlling Bank (a “ **Parent** ”) as a consequence of its obligations hereunder to a level below that which Bank (or its Parent) could have achieved but for such adoption, change, or compliance (taking into consideration policies with respect to capital adequacy) by an amount deemed by Bank to be material, then from time to time, within five (5) days after demand by Bank, Borrower shall pay to Bank such additional amount or amounts as will compensate Bank for such reduction. A statement of Bank claiming compensation under this Section 3.7(b) and setting forth the additional amount or amounts to be paid to it hereunder shall be conclusive absent manifest error.

Notwithstanding anything to the contrary in this Section 3.7, Borrower shall not be required to compensate Bank pursuant to this Section 3.7(b) for any amounts incurred more than nine (9) months prior to the date that Bank notifies Borrower of Bank’s intention to claim compensation therefor; provided that if the circumstances giving rise to such claim have a

retroactive effect, then such nine-month period shall be extended to include the period of such retroactive effect. The obligations of the Borrower arising pursuant to this Section 3.7(b) shall survive the Revolving Line Maturity Date, the termination of this Agreement and the repayment of all Obligations.

(c) If, at any time, Bank, in its sole and absolute discretion, determines that (i) the amount of LIBOR Advances for periods equal to the corresponding Interest Periods are not available to Bank in the offshore currency interbank markets, or (ii) LIBOR does not accurately reflect the cost to Bank of lending the LIBOR Advances, then Bank shall promptly give notice thereof to Borrower. Upon the giving of such notice, Bank's obligation to make the LIBOR Advances shall terminate; provided, however, LIBOR Advances shall not terminate if Bank and Borrower agree in writing to a different interest rate applicable to LIBOR Advances.

(d) If it shall become unlawful for Bank to continue to fund or maintain any LIBOR Advances, or to perform its obligations hereunder, upon demand by Bank, Borrower shall prepay the LIBOR Advances in full with accrued interest thereon and all other amounts payable by Borrower hereunder with respect to such LIBOR Advances (including, without limitation, any amount payable in connection with such prepayment pursuant to Section 3.6(c)(ii)). Notwithstanding the foregoing, to the extent a determination by Bank as described above relates to a LIBOR Advance then being requested by Borrower pursuant to a Notice of Borrowing or a Notice of Conversion/Continuation, Borrower shall have the option, subject to the provisions of Section 3.6(c)(ii), to (i) rescind such Notice of Borrowing or Notice of Conversion/Continuation by giving notice (by facsimile or by telephone confirmed in writing) to Bank of such rescission on the date on which Bank gives notice of its determination as described above, or (ii) modify such Notice of Borrowing or Notice of Conversion/Continuation to obtain a Prime Rate Advance or to have outstanding Advances converted into or continued as Prime Rate Advances by giving notice (by facsimile or by telephone confirmed in writing) to Bank of such modification on the date on which Bank gives notice of its determination as described above.

4 CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest . Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof.

Borrower acknowledges that it previously has entered, and/or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Borrower agrees that any amounts Borrower owes Bank thereunder shall be deemed to be Obligations hereunder and that it is the intent of Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (subject only to Permitted Liens that are permitted pursuant to the terms of this Agreement to have superior priority to Bank's Lien in this Agreement).

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations and obligations with respect to Bank Services Agreements) are satisfied in full in cash. Upon satisfaction in full in cash of the

Obligations (other than inchoate indemnity obligations with respect to Bank Services Agreements) and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall, at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to Borrower. In the event (x) all Obligations (other than inchoate indemnity obligations), except for Bank Services, are satisfied in full, and (y) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Borrower providing cash collateral acceptable to Bank in its good faith business judgment for Bank Services, if any. In the event such Bank Services consist of outstanding Letters of Credit, Borrower shall provide to Bank cash collateral in an amount equal to (x) if such Letters of Credit are denominated in Dollars, then at least one hundred five percent (105.0%); and (y) if such Letters of Credit are denominated in a Foreign Currency, then at least one hundred ten percent (110.0%), of the Dollar Equivalent of the undrawn face amount of all such Letters of Credit plus one hundred percent (100%) of all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment), to secure all of the Obligations relating to such Letters of Credit.

4.2 Priority of Security Interest . Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that may have superior priority to Bank's Lien under this Agreement and to certain exceptions explicitly set forth in this Agreement). If Borrower shall acquire a commercial tort claim, Borrower shall promptly notify Bank in a writing signed by Borrower of the general details thereof and grant to Bank in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Bank.

4.3 Authorization to File Financing Statements . Borrower hereby authorizes Bank to file financing statements, with notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights hereunder, including a notice that any disposition of the Collateral, by either Borrower or any other Person not in accordance with this Agreement, may be deemed to violate the rights of Bank under the Code.

5 REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization; Authorization; Power and Authority . Borrower and each of its Subsidiaries are duly existing and in good standing as a Registered Organization in its jurisdiction of formation and each is qualified and licensed to do business and each is in good standing in any jurisdiction in which the conduct of each of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to cause a Material Adverse Change. In connection with this Agreement, Borrower has delivered to Bank completed certificates each signed by Borrower and Guarantor, respectively, entitled "Perfection Certificate". Borrower represents and warrants to Bank that (a) Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth Borrower's organizational identification number or accurately states that Borrower has none; (d) the Perfection Certificate accurately sets forth Borrower's place of business, or, if more than one, its

chief executive office as well as Borrower's mailing address (if different than its chief executive office); (e) except as set forth on the Perfection Certificate, Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to Borrower and each of its Subsidiaries is accurate and complete (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement). If Borrower is not now a Registered Organization but later becomes one, Borrower shall promptly notify Bank of such occurrence and provide Bank with Borrower's organizational identification number (if available from the relevant jurisdiction).

The execution, delivery and performance by Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) or (v) constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a Material Adverse Change.

5.2 Collateral . Borrower has good title to, has rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no Collateral Accounts at or with any bank or financial institution other than Bank or Bank's Affiliates except for the Collateral Accounts described in the Perfection Certificate delivered to Bank in connection herewith, or of which Borrower has given Bank notice and taken such actions as are necessary to give Bank a perfected security interest therein, to the extent required by Section 6.8(b). The Accounts are bona fide, existing obligations of the Account Debtors.

The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate. None of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2.

All Inventory is in all material respects of good and marketable quality, free from material defects, except normal and customary quality issues occurring in the ordinary course of business, in amounts consistent with past practices.

Borrower is the sole owner of the Intellectual Property which it owns or purports to solely own except for (a) non-exclusive licenses granted to its customers in the ordinary course of business, (b) over-the-counter software that is commercially available to the public, (c) any rights the U.S. Government may have in connection with Borrower's contracts with the U.S.

Government entities as noted in the Perfection Certificate; and (d) material Intellectual Property licensed to Borrower and noted on the Perfection Certificate. Each Patent which it owns or purports to own and which is material to Borrower's business is valid and enforceable, and no part of the Intellectual Property which Borrower owns or purports to own and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Borrower's knowledge, no claim has been made that any part of the Intellectual Property violates the rights of any third party except to the extent such claim would not have a material adverse effect on Borrower's business, taken as a whole.

Except as noted on the Perfection Certificate, Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Accounts Receivable; Inventory .

(a) For each Account with respect to which Advances are requested, on the date each Advance is requested and made, such Account shall be an Eligible Account.

(b) All statements made and all unpaid balances appearing in all invoices, instruments and other documents evidencing the Eligible Accounts are and shall be true and correct and all such invoices, instruments and other documents, and all of Borrower's Books are genuine and in all respects what they purport to be. Whether or not an Event of Default has occurred and is continuing, Bank may, after consultation with Borrower, notify any Account Debtor owing Borrower money of Bank's security interest in such funds and verify the amount of such Eligible Accounts. All sales and other transactions underlying or giving rise to each Eligible Account shall comply in all material respects with all applicable laws and governmental rules and regulations. Borrower has no knowledge of any actual or imminent Insolvency Proceeding of any Account Debtor whose accounts are Eligible Accounts in any Transaction Report. To the Borrower's knowledge, all signatures and endorsements on all documents, instruments, and agreements relating to (i) all Eligible Accounts are genuine, and (ii) all such documents, instruments and agreements are legally enforceable in accordance with their terms.

(c) For any item of Inventory consisting of Eligible Inventory in any Transaction Report, such Inventory (i) consists of finished goods, in good, new, and salable condition, which is not perishable, returned, consigned, obsolete, not sellable, damaged, or defective, and is not comprised of demonstrative or custom inventory, works in progress, packaging or shipping materials, or supplies; (ii) meets all applicable governmental standards; (iii) has been manufactured in compliance with the Fair Labor Standards Act; (iv) is not subject to any Liens, except the first priority Liens granted or in favor of Bank under this Agreement or any of the other Loan Documents; and (v) is located at Borrower's East Providence, Rhode Island locations identified by Borrower in the Perfection Certificate where it maintains Inventory (or at any location permitted under Section 7.2) .

5.4 Litigation . There are no actions or proceedings pending or, to the knowledge of any Responsible Officer, threatened in writing by or against Borrower or any of its Subsidiaries involving more than, individually or in the aggregate, One Hundred Fifty Thousand Dollars (\$150,000).

5.5 Financial Condition . All consolidated financial statements for Borrower delivered to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations. There has not been any Material Adverse Change since December 31, 2013.

5.6 Solvency . The fair salable value of Borrower's and its Subsidiaries' assets, taken as a whole (including goodwill minus disposition costs) exceeds the fair value of their liabilities; Borrower and its Subsidiaries are not left with unreasonably small capital after the transactions in this Agreement; and Borrower and its Subsidiaries, taken as a whole, are able to pay their debts (including trade debts) as they mature.

5.7 Regulatory Compliance . Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower (a) has complied in all material respects with all Requirements of Law which would reasonably be expected to cause a Material Adverse Change, and (b) has not violated any Requirements of Law the violation of which could reasonably be expected to cause a Material Adverse Change. Except as described in the Perfection Certificate or otherwise disclosed to Bank, none of Borrower's or any of its Subsidiaries' properties or assets has been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Government Authorities that are necessary to continue their respective businesses as currently conducted, the absence of which could reasonably be expected to have a Material Adverse Effect.

5.8 Subsidiaries; Investments . Borrower does not own any stock, partnership interest or other equity securities except for Permitted Investments.

5.9 Tax Returns and Payments; Pension Contributions . Borrower has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and material local taxes, assessments, deposits and contributions owed by Borrower except to the extent such taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor.

To the extent Borrower defers payment of any contested taxes in an amount in excess of \$100,000, Borrower shall (i) notify Bank in writing of the commencement of, and any material development in, the proceedings, and (ii) posts bonds or takes any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien." Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional taxes in an amount in excess of \$100,000 becoming due and payable by Borrower. Borrower has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event

with respect to, any such plan which could reasonably be expected to result in any liability of Borrower in an amount in excess of \$100,000, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

5.10 Use of Proceeds . Borrower shall use the proceeds of the Credit Extensions solely as working capital to fund its general business requirements and not for personal, family, household or agricultural purposes.

5.11 Full Disclosure . No written representation, warranty or other statement of Borrower in any certificate or written statement given to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Bank, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.12 Definition of “Knowledge” . For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower’s knowledge or awareness, to the “best of” Borrower’s knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer.

6 AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 Government Compliance .

(a) Maintain its and all its Subsidiaries’ legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected a Material Adverse Effect. Borrower shall comply, and have each Subsidiary comply, in all material respects, with all laws, ordinances and regulations to which it is subject, the noncompliance with which could have a Material Adverse Effect.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Bank in the Collateral. Borrower shall, upon request from the Bank, promptly provide copies of any such obtained Governmental Approvals to Bank.

6.2 Financial Statements, Reports, Certificates . Provide Bank with the following:

(a) a Transaction Report (and any schedules related thereto) (i) with each request for an Advance, (ii) on the fifteenth (15th) day (if the 15th is not a Business Day, on the preceding Business Day) and last day of each month when a Streamline Period is not in effect, and (iii) within twenty (20) days after the end of each month when a Streamline Period is in effect;

(b) within twenty (20) days after the end of each month, (A) monthly accounts receivable agings, aged by invoice date, (B) monthly accounts payable agings, aged by invoice date, and outstanding or held check registers, if any, (C) monthly reconciliations of accounts receivable agings (aged by invoice date), transaction reports, Deferred Revenue report, and general ledger, and (D) monthly perpetual inventory reports for Inventory valued on a first-in, first-out basis at the lower of cost or market (in accordance with GAAP) or such other inventory reports as are requested by Bank in its good faith business judgment;

(c) as soon as available, but no later than thirty (30) days after the last day of the first two (2) months of each fiscal quarter of Borrower, a company prepared consolidated balance sheet and income statement covering Borrower's consolidated operations for such month certified by a Responsible Officer and in a form acceptable to Bank (the "**Monthly Financial Statements**");

(d) within thirty (30) days after the last day of the first two (2) months of each fiscal quarter of Borrower and together with the Monthly Financial Statements, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Bank may reasonably request, including, without limitation, a statement that at the end of such month there were no held checks;

(e) as soon as available, and in any event within forty-five (45) days after the end of each fiscal quarter of Borrower, (i) company prepared consolidated balance sheet and income statement covering Borrower's consolidated operations for such quarter certified by a Responsible Officer and in a form acceptable to Bank, and (ii) a Compliance Certificate;

(f) within thirty (30) days after the end of each fiscal year of Borrower, or more frequently as updated by Borrower's board of directors, (A) annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower, and (B) annual financial projections for the following fiscal year (on a quarterly basis) as approved by Borrower's board of directors, together with any related business forecasts used in the preparation of such annual financial projections;

(g) as soon as available, and in any event within one hundred fifty (150) days following the end of Borrower's fiscal year, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from KPMG LLP, or such other independent certified public accounting firm reasonably acceptable to Bank;

(h) for so long as Borrower is subject to the reporting requirements under the Exchange Act within five (5) days of filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or

distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the Internet at Borrower's website address; provided, however, Borrower shall promptly notify Bank in writing (which may be by electronic mail) of the posting of any such documents;

(i) within five (5) days of delivery, copies of all material statements, reports and notices made available to Borrower's security holders or to any holders of Subordinated Debt which constitutes Material Indebtedness;

(j) prompt report of any legal actions pending or threatened in writing against Borrower or any of its Subsidiaries that would reasonably be expected to result in damages to Borrower or any of its Subsidiaries of, individually or in the aggregate, Two Hundred Fifty Thousand Dollars (\$250,000) or more; and

(k) other financial information reasonably requested by Bank.

6.3 Accounts Receivable .

(a) Schedules and Documents Relating to Accounts . Borrower shall deliver to Bank transaction reports and schedules of collections, as provided in Section 6.2, on Bank's standard forms; provided, however, that Borrower's failure to execute and deliver the same shall not affect or limit Bank's Lien and other rights in all of Borrower's Accounts, nor shall Bank's failure to advance or lend against a specific Account affect or limit Bank's Lien and other rights therein. If reasonably requested by Bank, Borrower shall furnish Bank with copies (or, at Bank's request after the occurrence and during the continuance of an Event of Default, to the extent available using commercially reasonable efforts, originals) of all contracts, orders, invoices, and other similar documents, and all shipping instructions, delivery receipts, bills of lading, and other evidence of delivery, for any goods the sale or disposition of which gave rise to such Accounts. In addition, Borrower shall deliver to Bank, on its reasonable request, to the extent available using commercially reasonable efforts, the originals of all instruments, chattel paper, security agreements, guarantees and other documents and property evidencing or securing any Accounts, in the same form as received, with all necessary endorsements, and copies of all credit memos.

(b) Disputes . Borrower shall promptly notify Bank of all disputes or claims relating to Accounts, to the extent such disputes or claims involve amounts in excess of Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate for all Account Debtors. Borrower may forgive (completely or partially), compromise, or settle any Account for less than payment in full, or agree to do any of the foregoing so long as (i) Borrower does so in good faith, in a commercially reasonable manner, in the ordinary course of business, in arm's-length transactions, and reports the same to Bank in the regular reports provided to Bank; (ii) no Event of Default has occurred and is continuing; and (iii) after taking into account all such discounts, settlements and forgiveness, the total outstanding Advances will not exceed the Availability Amount.

(c) **Collection of Accounts**. Borrower shall have the right to collect all Accounts, unless and until an Event of Default has occurred and is continuing. All payments on, and proceeds of, Accounts shall be deposited directly by the applicable Account Debtor into a lockbox account, or such other “blocked account” as Bank may specify (either such account, the “**Cash Collateral Account**”), pursuant to a blocked account agreement in form and substance satisfactory to Bank in its sole discretion. Whether or not an Event of Default has occurred and is continuing, Borrower shall immediately deliver all payments on and proceeds of Accounts to the Cash Collateral Account to be applied (i) prior to the occurrence and continuance of an Event of Default, (X) during a Streamline Period, transferred to an account of Borrower at Bank and (Y) when a Streamline Period is not in effect, to immediately reduce the Obligations, and (ii) following the occurrence and continuance of an Event of Default, applied pursuant to Section 9.4.

(d) **Returns**. Provided no Event of Default has occurred and is continuing, if any Account Debtor returns any Inventory having an aggregate value in excess of Two Hundred Fifty Thousand Dollars (\$250,000) to Borrower, Borrower shall promptly (i) use commercially reasonable efforts to determine the reason for such return, (ii) issue a credit memorandum to the Account Debtor in the appropriate amount, and (iii) provide a copy of such credit memorandum to Bank, upon request from Bank. In the event any attempted return occurs after the occurrence and during the continuance of any Event of Default, Borrower shall immediately notify Bank of the return of the Inventory.

(e) **Verification**. Bank may, from time to time, after consultation with Borrower, verify directly with the respective Account Debtors the validity, amount and other matters relating to the Accounts, either in the name of Borrower or Bank or such other name as Bank may choose.

(f) **No Liability**. Bank shall not be responsible or liable for any shortage or discrepancy in, damage to, or loss or destruction of, any goods, the sale or other disposition of which gives rise to an Account, or for any error, act, omission, or delay of any kind occurring in the settlement, failure to settle, collection or failure to collect any Account, or for settling any Account in good faith for less than the full amount thereof, nor shall Bank be deemed to be responsible for any of Borrower’s obligations under any contract or agreement giving rise to an Account. Nothing herein shall, however, relieve Bank from liability for its own gross negligence or willful misconduct.

6.4 Remittance of Proceeds . Except as otherwise provided in Section 6.3(c), deliver, in kind, all proceeds arising from the disposition of any Collateral to Bank in the original form in which received by Borrower not later than the following Business Day after receipt by Borrower, to be applied to the Obligations (a) prior to an Event of Default, pursuant to the terms of Section 2.6(b) hereof, and (b) after the occurrence and during the continuance of an Event of Default, pursuant to the terms of Section 9.4 hereof; provided that, if no Event of Default has occurred and is continuing, Borrower shall not be obligated to remit to Bank the proceeds of the sale of surplus, worn out or obsolete Equipment disposed of by Borrower in good faith in an arm’s length transaction for an aggregate purchase price of Five Hundred Thousand Dollars (\$500,000) or less (for all such transactions in any fiscal year). Borrower agrees that it will maintain all proceeds of Collateral in an account maintained with Bank. Nothing in this Section limits the restrictions on disposition of Collateral set forth elsewhere in this Agreement.

6.5 Taxes; Pensions . Timely file, and require each of its Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and material local taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.9 hereof, and shall deliver to Bank, within five (5) days, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, except as would not reasonably be expected to result in any liability to Borrower in an amount in excess of \$100,000.

6.6 Access to Collateral; Books and Records . At reasonable times, on one (1) Business Day's notice (provided no notice is required if an Event of Default has occurred and is continuing), Bank, or its agents, shall have the right to inspect the Collateral and the right to audit and copy Borrower's Books. The foregoing inspections and audits shall be conducted at Borrower's expense and no more often than once every six (6) months unless an Event of Default has occurred and is continuing in which case such inspections and audits shall occur as often as Bank shall determine is necessary. The charge therefor shall be \$850 per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Bank schedule an audit more than five (5) days in advance, and Borrower cancels or seeks to reschedule the audit with less than five (5) days written notice to Bank, then (without limiting any of Bank's rights or remedies) Borrower shall reimburse Bank a for any costs incurred by Bank, plus any out-of-pocket expenses directly relating to the cancellation or rescheduling.

6.7 Insurance .

(a) Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Bank may reasonably request. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of Borrower, and in amounts that are reasonably satisfactory to Bank. All property policies insuring the Collateral shall have a lender's loss payable endorsement showing Bank as the sole lender loss payee. All liability policies shall show, or have endorsements showing, Bank as an additional insured. Bank shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral.

(b) Ensure that proceeds payable under any property policy for any Collateral are, at Bank's option, payable to Bank on account of the Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to Two Hundred Fifty Thousand Dollars (\$250,000) with respect to any loss, but not exceeding Five Hundred Thousand Dollars (\$500,000) in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and

(ii) shall be deemed Collateral in which Bank has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Bank, be payable to Bank on account of the Obligations.

(c) At Bank's request, Borrower shall deliver certificates of insurance policies and evidence of all premium payments. Each provider of any such insurance required under this Section 6.7 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Bank, that it will give Bank thirty (30) days prior written notice before any such policy or policies shall be materially altered or canceled. If Borrower fails to obtain insurance as required under this Section 6.7 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.7, and take any action under the policies Bank deems prudent.

6.8 Operating Accounts .

(a) Maintain all of its and its Subsidiaries' (other than Aspen Aerogels Germany GmbH) operating and other deposit accounts, and at least seventy-five percent (75%) of the dollar value of Borrower's securities accounts, with Bank and Bank's Affiliates.

(b) Provide Bank five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates. For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument customary to such other banks or financial institutions with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank, provided that Control Agreements shall not be required for Collateral Accounts with a balance of less than \$50,000 individually or \$250,000 in the aggregate.

6.9 Financial Covenants .

(a) EBITDA. Borrower shall achieve, measured as of the end of each fiscal quarter during the following periods, EBITDA of at least the following for the following periods:

Period	Minimum EBITDA
Trailing three (3) month period ending September 30, 2014	\$ 1.00
Trailing six (6) month period ending December 31, 2014	\$ 500,000
Trailing nine (9) month period ending March 31, 2015	\$ 500,000
Trailing twelve (12) month period ending June 30, 2015	\$ 2,500,000
Trailing twelve (12) month period ending September 30, 2015, and each trailing twelve (12) month period thereafter	\$ 4,500,000

(b) **Maximum Unfinanced Capital Expenditures**. Commencing on July 1, 2014 through each of the following periods, Borrower shall not incur Unfinanced Capital Expenditures (on a cumulative basis beginning on July 1, 2014) in excess of (i) Fifteen Million Dollars (\$15,000,000) through September 30, 2014, (ii) Thirty Million Dollars (\$30,000,000) through December 31, 2014, (iii) Forty Million Dollars (\$40,000,000) through March 31, 2015, (iv) Forty Five Million Dollars (\$45,000,000) through June 30, 2015, and (v) Fifty Million Dollars (\$50,000,000) at all times thereafter.

6.10 Protection of Intellectual Property Rights .

(a) Except as would not reasonably be expected to cause a Material Adverse Change, (i) take such action as, in its reasonable business judgment, it deems necessary to protect, defend and maintain the validity and enforceability of its Intellectual Property; (ii) promptly advise Bank in writing of material infringements of its Intellectual Property; and (iii) not take any action or omit to take any action which would reasonably be expected to result in any Intellectual Property being abandoned, forfeited or dedicated to the public without Bank's written consent.

(b) Provide written notice to Bank within ten (10) days of entering or becoming bound by any Restricted License which constitutes a Material Contract (other than over-the-counter software that is commercially available to the public). Upon the occurrence and during the continuance of an Event of Default, Borrower shall take such steps as Bank reasonably requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any Restricted License which constitutes a Material Contract to be deemed "Collateral" and for Bank to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Bank to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

6.11 Litigation Cooperation . From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, Borrower and its officers, employees and agents and Borrower's Books, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

6.12 Formation or Acquisition of Subsidiaries . Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, in the event Borrower or any Guarantor creates or acquires any Subsidiary, Borrower and such Guarantor shall, prior to

the creation or acquisition of such new Subsidiary, promptly notify the Bank thereof and, at Bank's request, in its sole discretion, take all such action as may be reasonably required by Bank to (a) cause each such Subsidiary to, in Bank's sole discretion, become a co-borrower or Guarantor hereunder, together with such appropriate financing statements and/or Control Agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Bank; provided, that with respect to any Foreign Subsidiary, Borrower shall only be required to grant and pledge to Bank a perfected security interest in up to sixty-five percent (65%) of the stock, units or other evidence of ownership of such Foreign Subsidiary; and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, including one or more opinions of counsel satisfactory to Bank, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.12 shall be a Loan Document.

6.13 Further Assurances . Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement unless specifically waived in writing by Bank. Borrower shall deliver to Bank, within five (5) days after the same are sent or received, copies of all correspondence, reports, documents and other filings with any Governmental Authority regarding compliance with or maintenance of Governmental Approvals or Requirements of Law or that could reasonably be expected to cause a Material Adverse Change.

7 NEGATIVE COVENANTS

Borrower shall not do any of the following without Bank's prior written consent:

7.1 Dispositions . Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, " **Transfer** "), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn out or obsolete Equipment; (c) consisting of Permitted Liens and Permitted Investments; and (d) of non-exclusive licenses for the use of the property of Borrower or its Subsidiaries in the ordinary course of business.

7.2 Changes in Business, Management, Ownership, or Business Locations . (a) Engage in or permit any of its Subsidiaries, if any, to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) both of the Key Persons cease to hold such offices with Borrower and replacements satisfactory to Bank are not made within one hundred twenty (120) days after each such Key Person's departure from Borrower; or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty percent (40%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower's equity securities in a public offering or to venture capital or private equity investors so long as Borrower identifies to Bank

the venture capital or private equity investors at least seven (7) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction).

Borrower shall not, without at least ten (10) days prior written notice to Bank: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Two Hundred Fifty Thousand Dollars (\$250,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Two Hundred Fifty Thousand Dollars (\$250,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate or for which a bailee agreement has been executed, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Two Hundred Fifty Thousand Dollars (\$250,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will first receive the written consent of Bank, and such bailee shall execute and deliver a bailee agreement in form and substance satisfactory to Bank in its reasonable discretion.

7.3 Mergers or Acquisitions . Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person (including, without limitation, by the formation of any Subsidiary). A Subsidiary may merge or consolidate into another Subsidiary or into Borrower.

7.4 Indebtedness . Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance . Create, incur, allow, or suffer any Lien (other than Permitted Liens) on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens. Borrower shall not permit any Collateral to be subject to any Liens other than the first priority security interest granted herein or Permitted Liens, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank except as otherwise permitted herein) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and in the definition of "Permitted Liens" herein or with respect to any Excluded Intellectual Property.

7.6 Maintenance of Collateral Accounts . Maintain any Collateral Account except pursuant to the terms of Section 6.8(b) hereof.

7.7 Distributions; Investments . (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock; or (b) directly or indirectly make any Investment (including, without limitation, any additional Investment in any Subsidiary or by the formation of any Subsidiary) other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates . Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower (other than a Guarantor), except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person.

7.9 Subordinated Debt . (a) Make or permit any payment on any Subordinated Debt, except as permitted under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof, or adversely affect the subordination thereof to Obligations owed to Bank.

7.10 Compliance . Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or non-exempt Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Borrower's business, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower in an amount in excess of \$250,000, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

8 EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default** ") under this Agreement:

8.1 Payment Default . Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Revolving Line Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default .

(a) Borrower fails or neglects to perform any obligation in Sections 6.2 (provided, however, Borrower shall have ten (10) Business Days from the scheduled due date to cure any default under clauses 6.2(b)-(d) and 6.2(i)), 6.5, 6.7(a), 6.8(a), 6.9, 6.10(b), 6.12, 6.13 or violates any covenant in Section 7; or

(b) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change . A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business .

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or of any entity under the control of Borrower (including a Subsidiary) on deposit or otherwise maintained with Bank or any Bank Affiliate, or (ii) a notice of lien or levy (other than a Permitted Lien) is filed against any of Borrower's assets by any Governmental Authority, and the same under subclauses (i) and (ii) hereof are not, within thirty (30) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any thirty (30) day cure period; or

(b) (i) any material portion of Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower from conducting any material part of its business;

8.5 Insolvency . (a) Borrower and its Subsidiaries, taken as a whole, are unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) Borrower begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower and not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements . There is, under any Material Contract to which Borrower or any Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Material Indebtedness; or (b) any default by Borrower or Guarantor, the result of which would reasonably be expected to cause a Material Adverse Change;

8.7 Judgments . One or more final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Fifty Thousand Dollars (\$250,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower and the same are not, within thirty (30) days after the entry thereof, discharged or after execution thereof, stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, stay, or bonding of such judgment, order or decree);

8.8 Misrepresentations . Borrower or any Responsible Officer makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt . Any document, instrument, or agreement evidencing the subordination of any Subordinated Debt to the Obligations shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement;

8.10 Guaranty . (a) Any guaranty of any Obligations terminates or ceases for any reason to be in full force and effect which could reasonably be expected to have a material adverse effect on the ability of the Borrower and its Subsidiaries, taken as a whole, to repay the Obligations; (b) any Guarantor does not perform any obligation or covenant under any guaranty of the Obligations which could reasonably be expected to have a material adverse effect on the ability of the Borrower and its Subsidiaries, taken as a whole, to repay the Obligations; (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.7, or 8.8 occurs with respect to any Guarantor which could reasonably be expected to have a material adverse effect on the ability of the Borrower and its Subsidiaries, taken as a whole, to repay the Obligations, (d) the liquidation, winding up, or termination of existence of any Guarantor; or (e) a material impairment in the perfection or priority of Bank's Lien in the collateral provided by Guarantor or in the value of such Collateral; or

8.11 Governmental Approvals . Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in an adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could result in the Governmental Authority taking any of the actions described in clause (a) above, and, in each case, such decision or such revocation, rescission, suspension, modification or non-renewal has, or could reasonably be expected to have, a Material Adverse Change.

9 BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies . When an Event of Default has occurred and is continuing, Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

(c) demand that Borrower (i) deposit cash with Bank in an amount equal to at least 105% (110% in the case of any Letter of Credit denominated in a Foreign Currency) of the Dollar Equivalent of the aggregate face amount of all Letters of Credit remaining undrawn (plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment)), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit; provided, however, if an Event of Default described in Section 8.5 occurs, the obligations of Borrower to cash collateralize all Letters of Credit remaining undrawn shall automatically become effective without any action by Bank;

(d) terminate any FX Contracts;

(e) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, and notify any Person owing Borrower money of Bank's security interest in such funds;

(f) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(g) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of Borrower;

(h) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(i) place a “hold” on any Collateral Account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(j) demand and receive possession of Borrower’s Books; and

(k) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney . Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower’s name on any checks or other forms of payment or security; (b) sign Borrower’s name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Bank determines reasonable; (d) make, settle, and adjust all claims under Borrower’s insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Bank or a third party as the Code permits. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower’s name on any documents necessary to perfect or continue the perfection of Bank’s security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations have been satisfied in full and Bank is under no further obligation to make Credit Extensions hereunder. Bank’s foregoing appointment as Borrower’s attorney in fact, and all of Bank’s rights and powers, being coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed and Bank’s obligation to provide Credit Extensions terminates.

9.3 Protective Payments . If Borrower fails to obtain the insurance called for by Section 6.7 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank’s waiver of any Event of Default.

9.4 Application of Payments and Proceeds . If an Event of Default has occurred and is continuing, Bank may apply any funds in its possession in any Collateral Account, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations in such order as Bank shall determine in its sole discretion. Any surplus shall be paid to Borrower or to other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, in its good faith business judgment, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral . So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative . Bank's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver . Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10 NOTICES

All notices, consents, requests, approvals, demands, or other communication (collectively, "**Communication**"), other than Advance requests made pursuant to Section 3.4, by any party to this Agreement or any other Loan Document must be in writing and be delivered or sent by facsimile at the addresses or facsimile numbers listed below. Bank or Borrower may change its notice address by giving the other party written notice thereof. Each such Communication shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, registered or certified mail, return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by facsimile transmission (with such facsimile promptly confirmed by delivery of a copy by personal delivery or United States mail as otherwise provided in this Section 10); (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address or facsimile number indicated below. Advance requests made pursuant to Section 3.4 must be in writing and may be in the form of electronic mail, delivered to Bank by Borrower at the e-mail address of Bank provided below and shall be deemed to have been validly served, given, or delivered when sent (with such electronic mail promptly confirmed by delivery of a copy by personal delivery or United States mail as otherwise provided in this Section 10). Bank or Borrower may change its address, facsimile number, or electronic mail address by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower: Aspen Aerogels, Inc.
30 Forbes Road, Building B
Northborough, Massachusetts 01532
Attn: John F. Fairbanks
Fax: (508) 691-1200
Email: jfairbanks@aerogels.com

If to Bank: Silicon Valley Bank
275 Grove Street, Suite 2-200
Newton, Massachusetts 02466
Attn: Christopher Leary
Fax: (617) 527-0177
Email: cleary@svb.com

with a copy to: Riemer & Braunstein LLP
Three Center Plaza
Boston, Massachusetts 02108
Attn: Charles W. Stavros, Esquire
Fax: (617) 880-3456
Email: cstavros@riemerlaw.com

11 CHOICE OF LAW, VENUE, JURY TRIAL WAIVER

Massachusetts law governs the Loan Documents without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Massachusetts; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Bank. Borrower expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL .

This Section 11 shall survive the termination of this Agreement.

12 GENERAL PROVISIONS

12.1 Termination Prior to Revolving Line Maturity Date; Survival . All covenants, representations and warranties made in this Agreement shall continue in full force until this Agreement has terminated pursuant to its terms and all Obligations have been satisfied. So long as Borrower has satisfied the Obligations (other than inchoate indemnity obligations, any other obligation which, by their terms, are to survive the termination of this Agreement, and any Obligations under Bank Services Agreements that are cash collateralized in accordance with Section 4.1 of this Agreement), this Agreement may be terminated prior to the Revolving Line Maturity Date by Borrower, effective three (3) Business Days after written notice of termination is given to Bank. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination.

12.2 Successors and Assigns . This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents; provided, that, prior to the occurrence and during the continuance of an Event of Default, any such sale, transfer, assignment, negotiation or grant of a participation to a Person or entity other than an institutional lender shall require Borrower's prior written consent, such consent not to be unreasonably withheld.

12.3 Indemnification . Borrower agrees to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Bank (each, an "**Indemnified Person** ") harmless against: (i) all obligations, demands, claims, and liabilities (collectively, "**Claims** ") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (ii) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Borrower contemplated by the Loan Documents (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

This Section 12.3 shall survive until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run.

12.4 Time of Essence . Time is of the essence for the performance of all Obligations in this Agreement.

12.5 Severability of Provisions . Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.6 Correction of Loan Documents . Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties.

12.7 Amendments in Writing; Waiver; Integration . No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.8 Counterparts . This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.9 Confidentiality . In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Bank, collectively, "**Bank Entities**"); (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use commercially reasonable efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision; (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain after disclosure to Bank; or (ii) disclosed to Bank by a third party, if Bank does not know that the third party is prohibited from disclosing the information.

Bank Entities may use the confidential information for reporting purposes and the development and distribution of databases and market analyses so long as such confidential information is aggregated and anonymized prior to distribution, unless otherwise expressly permitted by Borrower. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.10 Attorneys' Fees, Costs and Expenses . In any action or proceeding between Borrower and Bank arising out of or relating to the Loan Documents, the Bank shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

12.11 Electronic Execution of Documents . The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.12 Right of Setoff . Borrower hereby grants to Bank a Lien and a right of setoff as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits held in Collateral Accounts, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Bank (including a subsidiary of Bank) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may setoff the same or any part thereof and apply the same to any liability or Obligation of Borrower even though unmaturred and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.13 Captions . The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.14 Construction of Agreement . The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.15 Relationship . The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.16 Third Parties . Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

12.17 No Novation . Borrower and Bank hereby agree that, effective upon the execution and delivery of this Agreement by each such party, the terms and provisions of the Prior Loan Agreement shall be and hereby are amended, restated and superseded in their entirety by the terms and provisions of this Agreement. Nothing herein contained shall be construed as a substitution or novation of the obligations of Borrower outstanding under the Prior Loan Agreement or instruments securing the same, which obligations shall remain in full force and effect, except to the extent that the terms thereof are modified hereby or by instruments executed concurrently herewith. Nothing expressed or implied in this Agreement shall be construed as a release or other discharge of any Borrower from any of the Obligations or any liabilities under the Prior Loan Agreement or any of the security agreements, pledge agreements, mortgages, guaranties or other Loan Documents executed in connection therewith. Borrower hereby (i) confirms and agrees that each Loan Document to which it is a party is, and shall continue to be, in full force and effect and is hereby ratified and confirmed in all respects except that on and after the Effective Date all references in any such Loan Document to the “Loan and Security Agreement”, the “Loan Agreement” the “Agreement”, “thereto”, “thereof”, “thereunder” or words of like import referring to the Prior Loan Agreement shall mean the Prior Loan Agreement as amended and restated by this Agreement; and (ii) confirms and agrees that to the extent that the Prior Loan Agreement or any Loan Document executed in connection therewith purports to assign or pledge to the Bank, or to grant to the Bank a Lien on, any collateral as security for the Obligations of Borrower from time to time existing in respect of the Prior Loan Agreement, such pledge, assignment or grant of the Lien is hereby ratified and confirmed in all respects and shall remain effective as of the first date it became effective.

12.18 Reaffirmation of Stock Pledge Agreement. Borrower hereby ratifies, confirms and reaffirms, all and singular, the terms and conditions of the Stock Pledge Agreement, including any exhibits and/or schedules attached thereto, as in effect prior to the date hereof and/or as entered into as of the date hereof, to which Borrower is a party, and Borrower’s rights and obligations arising under the Stock Pledge Agreement. Borrower acknowledges, confirms and agrees that: (i) the Stock Pledge Agreement shall remain in full force and effect and shall in no way be limited by the execution of this Agreement or any other Loan Document, (ii) each reference in the Stock Pledge Agreement to the “Loan Agreement” shall mean the Prior Loan Agreement, as amended and restated by this Agreement, and (iii) any “Pledged Collateral” pledged to Bank under the Stock Pledge Agreement shall continue to secure the repayment in full of the “Obligations” as defined herein. Notwithstanding the foregoing, the Pledged Collateral does not include more than 65% of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by Borrower of any Foreign Subsidiary which shares entitle the holder thereof to vote for directors or any other matter.

13 DEFINITIONS

13.1 Definitions . As used in the Loan Documents, the word “shall” is mandatory, the word “may” is permissive, the word “or” is not exclusive, the words “includes” and “including” are not limiting, the singular includes the plural, and numbers denoting amounts that are setoff in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

“ **Account** ” is any “account” as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

“ **Account Debtor** ” is any “account debtor” as defined in the Code with such additions to such term as may hereafter be made.

“ **Adjusted Quick Ratio** ” means a ratio of (i) Quick Assets divided by (ii) the sum of (a) Current Liabilities plus (b) without duplication, all Obligations of Borrower to Bank, minus (c) the current portion of Deferred Revenue.

“ **Advance** ” or “ **Advances** ” means a revolving credit loan (or revolving credit loans) under the Revolving Line.

“ **Affiliate** ” is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person’s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person’s managers and members.

“ **Agreement** ” is defined in the preamble hereof.

“ **Aspen Aerogels Rhode Island** ” is Aspen Aerogels Rhode Island LLC, a Rhode Island limited liability company and wholly owned Subsidiary of Borrower.

“ **Authorized Signer** ” is any individual listed in Borrower’s Borrowing Resolution who is authorized to execute the Loan Documents, including any Notice of Borrowing or other Advance request, on behalf of Borrower.

“ **Availability Amount** ” is (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the Dollar Equivalent amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit plus an amount equal to the Letter of Credit Reserve), minus (c) the FX Reduction Amount, minus (d) any amounts used for Cash Management Services, and minus (e) the outstanding principal balance of any Advances. The aggregate amount of all Advances (including, without limitation, the Dollar Equivalent amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit plus an amount equal to the Letter of Credit Reserve) , any outstanding FX Reduction Amount and any amounts used for Cash Management Services) under this Agreement outstanding at any time shall not exceed Twenty Million Dollars (\$20,000,000).

“ **Bank** ” is defined in the preamble hereof.

“ **Bank Entities** ” is defined in Section 12.9.

“ **Bank Expenses** ” are all audit fees and expenses, costs, and expenses (including reasonable attorneys’ fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower or any Guarantor.

“ **Bank Services** ” are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto (each, a “ **Bank Services Agreement** ”).

“ **Borrower** ” is defined in the preamble hereof.

“ **Borrower’s Books** ” are all Borrower’s books and records including ledgers, federal and state tax returns, records regarding Borrower’s assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“ **Borrowing Base** ” is (a) eighty percent (80%) of Eligible Accounts, plus (b) eighty percent (80%) of Eligible Foreign Accounts (provided, however, Eligible Foreign Accounts that are billed in a Foreign Currency shall have an advance rate of seventy percent (70%)), provided, that, the availability under this subsection (b) plus the availability under subsection (c) below shall not exceed seventy-five percent (75%) of the Borrowing Base, plus (c) (i) when a Streamline Period is not in effect, the lesser of eighty percent (80%) of Eligible Specified Accounts or One Million Dollars (\$1,000,000) and (ii) during a Streamline Period, eighty percent (80%) of Eligible Specified Accounts (and with respect to subsections (c)(i) and (c)(ii) hereof, when added to the availability under subsection (b) above, in each case subject to the overall cap set forth in subsection (b) above), plus (d) the lesser of thirty-five percent (35%) of the value of Borrower’s Eligible Inventory (valued at the lower of cost or wholesale fair market value) or Three Million Dollars (\$3,000,000), as determined by Bank from Borrower’s most recent Transaction Report; provided, however, that Bank may decrease the foregoing amounts and percentages in its good faith business judgment based on events, conditions, contingencies, or risks which, as determined by Bank, may adversely affect the Collateral.

“ **Borrowing Resolutions** ” are, with respect to any Person, those resolutions adopted by such Person’s Board of Directors or other appropriate body and delivered by such Person to Bank approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its secretary on behalf of such Person certifying that (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) attached as Exhibit A to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents, including any Notice of Borrowing or other Advance request, on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) Bank may conclusively rely on such certificate unless and until such Person shall have delivered to Bank a further certificate canceling or amending such prior certificate.

“ **Business Day** ” is any day that is not a Saturday, Sunday or other day on which banking institutions in the State of California or the Commonwealth of Massachusetts are authorized or required by law or other governmental action to close, except that if any determination of a “Business Day” shall relate to a LIBOR Advance, the term “Business Day” shall also mean a day on which dealings are carried on in the London interbank market, and if any determination of a “Business Day” shall relate to an FX Contract, the term “Business Day” shall mean a day on which dealings are carried on in the country of settlement of the Foreign Currency.

“ **Capital Expenditures** ” means, with respect to any Person for any period, the sum of (a) the aggregate of all expenditures by such Person and its Subsidiaries during such period that are capital expenditures as determined in accordance with GAAP, whether such expenditures are paid in cash or financed, plus (b) to the extent not covered by clause (a), the aggregate of all expenditures by such Person and its Subsidiaries during such period to acquire by purchase or otherwise the business or capitalized assets or the capital stock of any other Person.

“ **Cash Equivalents** ” means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc.; (c) Bank’s certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

“ **Cash Management Services** ” is defined in Section 2.2.4.

“ **Claims** ” is defined in Section 12.3.

“ **Code** ” is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the Commonwealth of Massachusetts; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank’s Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the Commonwealth of Massachusetts, the term “ **Code** ” shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

“ **Collateral** ” is any and all properties, rights and assets of Borrower described on Exhibit A.

“ **Collateral Account** ” is any Deposit Account, Securities Account, or Commodity Account. Notwithstanding anything set forth herein to the contrary, “Collateral Account” shall not include any Excluded Deposit Account.

“ **Commodity Account** ” is any “commodity account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Compliance Certificate** ” is that certain certificate in the form attached hereto as Exhibit B.

“ **Contingent Obligation** ” is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but “Contingent Obligation” does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

“ **Continuation Date** ” means any date on which Borrower continues a LIBOR Advance into another Interest Period.

“ **Control Agreement** ” is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

“ **Conversion Date** ” means any date on which Borrower converts a Prime Rate Advance to a LIBOR Advance or a LIBOR Advance to a Prime Rate Advance.

“ **Copyrights** ” are any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

“ **Credit Extension** ” is any Advance, any Overadvance, Letter of Credit, FX Contract, amount utilized for Cash Management Services, or any other extension of credit by Bank for Borrower’s benefit.

“ **Currency** ” is coined money and such other banknotes or other paper money as are authorized by law and circulate as a medium of exchange.

“ **Current Liabilities** ” are all Obligations and liabilities of Borrower owed to Bank, plus, without duplication, the aggregate amount of Borrower’s Total Liabilities that mature within one (1) year.

“ **Default** ” means any event which with notice or passage of time or both, would constitute an Event of Default.

“ **Default Rate** ” is defined in Section 2.4(e).

“ **Deferred Revenue** ” is all amounts received or invoiced in advance of performance under contracts and not yet recognized as revenue.

“ **Deposit Account** ” is any “deposit account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Designated Deposit Account** ” is the multicurrency account denominated in Dollars, account number ending 8273, maintained by Borrower with Bank.

“ **Dollars** , ” “ **dollars** ” or use of the sign “ **\$** ” means only lawful money of the United States and not any other currency, regardless of whether that currency uses the “\$” sign to denote its currency or may be readily converted into lawful money of the United States.

“ **Dollar Equivalent** ” is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

“ **Domestic Subsidiary** ” means a Subsidiary organized under the laws of the United States or any state or territory thereof or the District of Columbia.

“ **EBITDA** ” shall mean (a) Net Income, plus (b) Interest Expense, plus (c) to the extent deducted in the calculation of Net Income, depreciation expense and amortization expense, plus (d) income tax expense, plus (e) non-cash stock compensation.

“ **Effective Date** ” is defined in the preamble hereof.

“ **Eligible Accounts** ” means Accounts which arise in the ordinary course of Borrower’s business that meet all representations and warranties in Section 5.3. Bank reserves the right at any time and from time to time after the Effective Date upon notice to Borrower, to adjust any of the criteria set forth below and to establish new criteria in its good faith business judgment. Without limiting the fact that the determination of which Accounts are eligible for borrowing is a matter of Bank’s good faith judgment, the following (“ **Minimum Eligibility Requirements** ”) are the minimum requirements for an Account to be an Eligible Account. Unless Bank otherwise agrees in writing, Eligible Accounts shall not include:

(a) Accounts for which the Account Debtor is Borrower’s Affiliate, officer, employee, or agent;

(b) Accounts that the Account Debtor has not paid within ninety (90) days of invoice date regardless of invoice payment period terms;

(c) Accounts with credit balances over ninety (90) days from invoice date;

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- (d) Accounts owing from an Account Debtor, in which fifty percent (50%) or more of the Accounts have not been paid within ninety (90) days of invoice date;
- (e) Accounts owing from an Account Debtor which does not have its principal place of business in the United States or Canada;
- (f) Accounts billed and/or payable outside of the United States (sometimes called foreign invoiced accounts);
- (g) Accounts owing from an Account Debtor to the extent that Borrower is indebted or obligated in any manner to the Account Debtor (as creditor, lessor, supplier or otherwise - sometimes called “contra” accounts, accounts payable, customer deposits or credit accounts);
- (h) Accounts owing from an Account Debtor which is a United States government entity or any department, agency, or instrumentality thereof unless Borrower has assigned its payment rights to Bank and the assignment has been acknowledged under the Federal Assignment of Claims Act of 1940, as amended;
- (i) Accounts for demonstration or promotional equipment, or in which goods are consigned, or sold on a “sale guaranteed”, “sale or return”, “sale on approval”, or other terms if Account Debtor’s payment may be conditional;
- (j) Accounts owing from an Account Debtor where goods or services have not yet been rendered to the Account Debtor (sometimes called memo billings or pre-billings);
- (k) Accounts subject to contractual arrangements between Borrower and an Account Debtor (other than Subsea 7, Technip, EMAS, HMC, Saipem, McDermott, Worley Parsons, MCS Kenny and any of their affiliates, for which this clause (k) shall not be applicable), where payments shall be scheduled or due according to completion or fulfillment requirements where the Account Debtor has a right of offset for damages suffered as a result of Borrower’s failure to perform in accordance with the contract (sometimes called contracts accounts receivable, progress billings, milestone billings, or fulfillment contracts);
- (l) Accounts owing from an Account Debtor the amount of which may be subject to withholding based on the Account Debtor’s satisfaction of Borrower’s complete performance (but only to the extent of the amount withheld; sometimes called retainage billings);
- (m) Accounts subject to Trust provisions subrogation rights of a bonding company, or a statutory trust;
- (n) Accounts owing from an Account Debtor that has been invoiced for goods that have not been shipped to the Account Debtor unless Bank, Borrower, and the Account Debtor have entered into an agreement acceptable to Bank in its sole discretion wherein the Account Debtor acknowledges that (i) it has title to and has ownership of the goods wherever located, (ii) a bona fide sale of the goods has occurred, and (iii) it owes payment for such goods in accordance with invoices from Borrower (sometimes called “bill and hold” accounts);

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- (o) Accounts for which the Account Debtor has not been invoiced;
 - (p) Accounts that represent non-trade receivables or that are derived by means other than in the ordinary course of Borrower's business;
 - (q) Accounts for which Borrower has permitted Account Debtor's payment to extend beyond ninety (90) days;
 - (r) Accounts arising from chargebacks, debit memos or other payment deductions taken by an Account Debtor;
 - (s) Accounts arising from product returns and/or exchanges (sometimes called "warranty" or "RMA" accounts);
 - (t) Accounts in which the Account Debtor disputes liability or makes any claim (but only up to the disputed or claimed amount), or if the Account Debtor is subject to an Insolvency Proceeding, or becomes insolvent, or goes out of business;
 - (u) Accounts owing from an Account Debtor with respect to which Borrower has received Deferred Revenue (but only to the extent of such Deferred Revenue);
 - (v) Accounts owing from an Account Debtor, whose total obligations to Borrower exceed thirty percent (30%) of all Accounts, for the amounts that exceed that percentage, unless Bank approves in writing;
 - (w) Accounts for which Bank in its good faith business judgment determines collection to be doubtful, including, without limitation, accounts represented by "refreshed" or "recycled" invoices; and
 - (x) other Accounts Bank deems ineligible in the exercise of its good faith business judgment.

"Eligible Foreign Accounts" are Accounts billed and collected by Borrower in the United States for which the Account Debtor is located in a country listed on Schedule I attached hereto, and such other countries approved by Bank in writing in its sole discretion on a case-by-case basis, that otherwise satisfy all criteria of Eligible Accounts (other than clause (e) in the definition thereof).

"Eligible Inventory" means Inventory that meets all of Borrower's representations and warranties in Section 5.3 and is otherwise acceptable to Bank in all respects.

"Eligible Specified Accounts" are Accounts billed and collected by Borrower in the United States for which the Account Debtor is specified in that certain side letter agreement between Bank and Borrower of even date herewith, that otherwise satisfy all criteria of Eligible Accounts (other than clause (e) in the definition thereof).

“ **Equipment** ” is all “equipment” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“ **ERISA** ” is the Employee Retirement Income Security Act of 1974, and its regulations.

“ **Event of Default** ” is defined in Section 8.

“ **Exchange Act** ” is the Securities Exchange Act of 1934, as amended.

“ **Excluded Deposit Account** ” means any Deposit Account exclusively used for payroll, payroll taxes and/or other employee wage and benefit payments to or for the benefit of Borrower’s or any Guarantor’s employees and identified to Bank by Borrower as such.

“ **Excluded Intellectual Property** ” means (i) any “intent-to-use” application for registration of a Trademark filed pursuant to Section 1(b) of the Lanham Act, 15 U.S.C. §1051, prior to the filing of a “Statement of Use” pursuant to Section 1(d) of the Lanham Act or an “Amendment to Allege Use” pursuant to Section 1(c) of the Lanham Act with respect thereto, solely to the extent that, and for so long as, the grant of a security interest or lien therein would impair the validity or enforceability of any registration that issues from such “intent-to-use” application under applicable federal law and (ii) any rights under any license of Intellectual Property if the grant of a security interest therein would be prohibited by the terms of such license, unless (x) the only consequence of breach of such terms would be to avoid or permit any other party to such license to avoid such security interest; or (y) such prohibition is rendered ineffective pursuant to the Uniform Commercial Code or any other applicable law.

“ **Foreign Currency** ” means lawful money of a country other than the United States.

“ **Foreign Subsidiary** ” means any direct or indirect Subsidiary of Borrower that is not a Domestic Subsidiary.

“ **Funding Date** ” is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

“ **FX Business Day** ” is any day when (a) Bank’s Foreign Exchange Department is conducting its normal business and (b) the Foreign Currency being purchased or sold by Borrower is available to Bank from the entity from which Bank shall buy or sell such Foreign Currency.

“ **FX Contract** ” is defined in Section 2.2.3.

“ **FX Reduction Amount** ” is defined in Section 2.2.3.

“ **GAAP** ” is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board

or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

“ **General Intangibles** ” is all “general intangibles” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind. Notwithstanding the foregoing, General Intangibles does not include Intellectual Property.

“ **Governmental Approval** ” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“ **Governmental Authority** ” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“ **Guarantor** ” is any present or future guarantor of the Obligations, including, without limitation, Aspen Aerogels Rhode Island.

“ **Guarantor Security Agreement** ” is the Amended and Restated Security Agreement of Aspen Aerogels Rhode Island in favor of Bank dated as of the Effective Date, as amended from time to time.

“ **Guaranty** ” is any guarantee of all or any part of the Obligations, including, without limitation, the Amended and Restated Unconditional Guaranty of Aspen Aerogels Rhode Island in favor of Bank dated as of the Effective Date, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“ **Indebtedness** ” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations (determined in accordance with GAAP), and (d) Contingent Obligations.

“ **Indemnified Person** ” is defined in Section 12.3.

“ **Insolvency Proceeding** ” is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“ **Intellectual Property** ” means, with respect to any Person, means all of such Person’s right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how and operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to such Person;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

“ **Interest Expense** ” means for any fiscal period, interest expense (whether cash or non-cash) determined in accordance with GAAP for the relevant period ending on such date, including, in any event, interest expense with respect to any Credit Extension and other Indebtedness of Borrower and its Subsidiaries, including, without limitation or duplication, all commissions, discounts, or related amortization and other fees and charges with respect to letters of credit and bankers’ acceptance financing and the net costs associated with interest rate swap, cap, and similar arrangements, and the interest portion of any deferred payment obligation (including leases of all types).

“ **Interest Payment Date** ” means, with respect to any LIBOR Advance, the last day of each Interest Period applicable to such LIBOR Advance and, with respect to Prime Rate Advances, the first day of each month (or, if that day of the month does not fall on a Business Day, then on the first Business Day following such date), and each date a Prime Rate Advance is converted into a LIBOR Advance to the extent of the amount converted to a LIBOR Advance.

“ **Interest Period** ” means, as to any LIBOR Advance, the period commencing on the date of such LIBOR Advance, or on the conversion/continuation date on which the LIBOR Advance is converted into or continued as a LIBOR Advance, and ending on the date that is one, two, or three months thereafter, in each case as Borrower may elect in the applicable Notice of Borrowing or Notice of Conversion/Continuation; provided, however, that (a) no Interest Period with respect to any LIBOR Advance shall end later than the Revolving Line Maturity Date, (b) the last day of an Interest Period shall be determined in accordance with the practices of the LIBOR interbank market as from time to time in effect, (c) if any Interest Period would otherwise end on a day that is not a Business Day, that Interest Period shall be extended to the following Business Day unless, in the case of a LIBOR Advance, the result of such extension would be to carry such Interest Period into another calendar month, in which event such Interest Period shall end on the preceding Business Day, (d) any Interest Period pertaining to a LIBOR Advance that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall

end on the last Business Day of the calendar month at the end of such Interest Period, and (e) interest shall accrue from and include the first Business Day of an Interest Period but exclude the last Business Day of such Interest Period.

“ **Interest Rate Determination Date** ” means each date for calculating the LIBOR for purposes of determining the interest rate in respect of an Interest Period. The Interest Rate Determination Date shall be the second Business Day prior to the first day of the related Interest Period for a LIBOR Advance.

“ **Inventory** ” is all “inventory” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“ **Investment** ” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

“ **Key Person** ” is each of Borrower’s Chief Executive Officer and President as of the Effective Date, who is Donald R. Young, and Chief Financial Officer as of the Effective Date, who is John F. Fairbanks.

“ **Letter of Credit** ” is a standby letter of credit issued by Bank or another institution based upon an application, guarantee, indemnity or similar agreement on the part of Bank as set forth in Section 2.2.2.

“ **Letter of Credit Application** ” is defined in Section 2.2.2(b).

“ **Letter of Credit Reserve** ” has the meaning set forth in Section 2.2.2(e).

“ **LIBOR** ” means, for any Interest Rate Determination Date with respect to an Interest Period for any Advance to be made, continued as or converted into a LIBOR Advance, the rate of interest per annum determined by Bank to be the per annum rate of interest at which deposits in Dollars are offered to Bank in the London interbank market (rounded upward, if necessary, to the nearest 0.0001%) in which Bank customarily participates at 11:00 a.m. (local time in such interbank market) two (2) Business Days prior to the first day of such Interest Period for a period approximately equal to such Interest Period and in an amount approximately equal to the amount of such Advance.

“ **LIBOR Advance** ” means an Advance that bears interest based at the LIBOR Rate.

“ **LIBOR Rate** ” means, for each Interest Period in respect of LIBOR Advances comprising part of the same Advances, an interest rate *per annum* (rounded upward, if necessary, to the nearest 0.0001%) equal to LIBOR for such Interest Period *divided by* one (1) *minus* the Reserve Requirement for such Interest Period.

“ **LIBOR Rate Margin** ” is the rate per annum set forth under the relevant column heading below:

<u>Borrowing Base Component</u>	<u>LIBOR Rate Margin during a Streamline Period</u>
Eligible Accounts	3.75%
Eligible Foreign Accounts and Eligible Inventory	4.25%

“ **Lien** ” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“ **Loan Documents** ” are, collectively, this Agreement and any schedules, exhibits, certificates, notices, and any other documents related to this Agreement, the Guaranty, the Guarantor Security Agreement, the Stock Pledge Agreement, any Bank Services Agreement, any subordination agreement, any note, or notes or guaranties executed by Borrower or any Guarantor, and any other present or future agreement between Borrower and/or any Guarantor and/or for the benefit of Bank in connection with this Agreement or Bank Services, all as amended, restated, or otherwise modified.

“ **Material Adverse Change** ” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or financial condition of Borrower and its Subsidiaries, taken as a whole; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“ **Material Contract** ” means any contract or agreement which, individually or in the aggregate, the termination of which could reasonably be expected to result in a Material Adverse Change.

“ **Material Indebtedness** ” means Indebtedness of the Borrower or its Subsidiaries in a principal amount in excess of \$250,000.

“ **Minimum Eligibility Requirements** ” is defined in the definition of Eligible Accounts.

“ **Monthly Financial Statements** ” is defined in Section 6.2(c).

“ **Net Income** ” means, as calculated on a consolidated basis for Borrower and its Subsidiaries for any period as at any date of determination, the net profit (or loss), after provision for taxes, of Borrower and its Subsidiaries for such period taken as a single accounting period.

“ **Notice of Borrowing** ” means a notice given by Borrower to Bank in accordance with Section 3.4(a), substantially in the form of Exhibit C, with appropriate insertions.

“ **Notice of Conversion/Continuation** ” means a notice given by Borrower to Bank in accordance with Section 3.5, substantially in the form of Exhibit D, with appropriate insertions.

“ **Obligations** ” are Borrower’s obligations to pay when due any debts, principal, interest, fees, Bank Expenses, and other amounts Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents, or otherwise, including, without limitation, all obligations relating to Letters of Credit (including reimbursement obligations for drawn and undrawn Letters of Credit), cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower’s duties under the Loan Documents.

“ **Operating Documents** ” are, for any Person, such Person’s formation documents, as certified by the Secretary of State of such Person’s state of formation on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

“ **Overadvance** ” is defined in Section 2.3.

“ **Patents** ” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“ **Perfection Certificate** ” is defined in Section 5.1.

“ **Permitted Indebtedness** ” is:

- (a) Borrower’s Indebtedness to Bank under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;
- (e) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of “Permitted Liens” hereunder;

(f) Indebtedness (i) of Subsidiaries owed to Borrower for any Subsidiary that has executed a Security Agreement in favor of the Bank and (ii) Subsidiaries owed to Borrower, in an aggregate amount, together with Investments permitted in connection with clause (d) of the definition of "Permitted Investments", not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in any fiscal year; and

(g) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (e) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

" Permitted Investments " are:

(a) Investments shown on the Perfection Certificate and existing on the Effective Date;

(b) Cash Equivalents;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower's business;

(d) Investments (i) by Borrower in any Subsidiary that has executed a Security Agreement in favor of Bank and (ii) by Borrower in any Subsidiary, in an aggregate amount, together with any Indebtedness described in clause (g) of the definition of "Permitted Indebtedness", not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in any fiscal year;

(e) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business; and

(f) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (f) shall not apply to Investments of Borrower in any Subsidiary.

" Permitted Liens " are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) purchase money Liens (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment securing no more than Five Hundred Thousand Dollars (\$500,000) in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(e) Liens incurred in the extension, renewal or refinancing of the Indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

(f) leases or subleases of real property granted in the ordinary course of Borrower's business, and leases, subleases, non-exclusive licenses or sublicenses of property (other than real property or Intellectual Property) granted in the ordinary course of Borrower's business, if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest;

(g) non-exclusive license of material Intellectual Property granted to third parties in the ordinary course of business, and licenses of material Intellectual Property that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States and any licenses of Intellectual Property which do not constitute material Intellectual Property;

(h) Liens securing Permitted Indebtedness; and

(i) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 or 8.7.

“ **Person** ” is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

“ **Prime Rate** ” is the rate of interest per annum from time to time published in the money rates section of The Wall Street Journal or any successor publication thereto as the “prime rate” then in effect; provided that if such rate of interest, as set forth from time to time in the money rates section of The Wall Street Journal, becomes unavailable for any reason as determined by Bank, the “Prime Rate” shall mean the rate of interest per annum announced by Bank as its prime rate in effect at its principal office in the State of California (such Bank announced Prime Rate not being intended to be the lowest rate of interest charged by Bank in connection with extensions of credit to debtors).

“ **Prime Rate Advance** ” means an Advance that bears interest based at the Prime Rate.

“ **Prime Rate Margin** ” is the rate per annum set forth under the relevant column heading below:

<u>Borrowing Base Component</u>	Prime Rate Margin	
	during a Streamline <u>Period</u>	Prime Rate Margin when a Streamline <u>Period is not in effect</u>
Eligible Accounts	0.75%	1.25%
Eligible Foreign Accounts and Eligible Inventory	1.25%	1.75%

“ **Prior Loan Agreement** ” is defined in the preamble hereof.

“ **Quick Assets** ” is, on any date, Borrower’s unrestricted cash maintained with Bank plus accounts receivable net of allowance for doubtful accounts.

“ **Registered Organization** ” is any “registered organization” as defined in the Code with such additions to such term as may hereafter be made.

“ **Regulatory Change** ” means, with respect to Bank, any change on or after the date of this Agreement in United States federal, state, or foreign laws or regulations, including Regulation D, or the adoption or making on or after such date of any interpretations, directives, or requests applying to a class of lenders including Bank, of or under any United States federal or state, or any foreign laws or regulations (whether or not having the force of law) by any court or governmental or monetary authority charged with the interpretation or administration thereof.

“ **Requirement of Law** ” is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“ **Reserve Requirement** ” means, for any Interest Period, the average maximum rate at which reserves (including any marginal, supplemental, or emergency reserves) are required to be maintained during such Interest Period under Regulation D against “Eurocurrency liabilities” (as such term is used in Regulation D) by member banks of the Federal Reserve System. Without limiting the effect of the foregoing, the Reserve Requirement shall reflect any other reserves required to be maintained by Bank by reason of any Regulatory Change against (a) any category of liabilities which includes deposits by reference to which the LIBOR Rate is to be determined as provided in the definition of LIBOR or (b) any category of extensions of credit or other assets which include Advances.

“ **Reserves** ” means, as of any date of determination, such amounts as Bank may from time to time establish and revise in good faith reducing the amount of Advances, Letters of

Credit and other financial accommodations which would otherwise be available to Borrower under the lending formulas: (a) to reflect events, conditions, contingencies or risks which, as determined by Bank in good faith, do or may affect (i) the Collateral or any other property which is security for the Obligations or its value (including without limitation any increase in delinquencies of Accounts), (ii) the assets, business of Borrower or any Guarantor, or (iii) the security interests and other rights of Bank in the Collateral (including the enforceability, perfection and priority thereof); or (b) to reflect Bank's good faith belief that any collateral report or financial information furnished by or on behalf of Borrower or any Guarantor to Bank is or may have been incomplete, inaccurate or misleading in any material respect; or (c) in respect of any state of facts which Bank determines in good faith constitutes an Event of Default or may, with notice or passage of time or both, constitute an Event of Default.

“ **Responsible Officer** ” is any of the Chief Executive Officer, President, Chief Financial Officer, Vice President (Finance) and Controller of Borrower.

“ **Restricted License** ” is any license or other agreement, the absence of which would be reasonably expected to cause a Material Adverse Effect, with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with the Bank's right to sell any Collateral.

“ **Revolving Line** ” is an aggregate principal amount not to exceed Twenty Million Dollars (\$20,000,000) outstanding at any time.

“ **Revolving Line Maturity Date** ” is August 31, 2016.

“ **SEC** ” shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“ **Securities Account** ” is any “securities account” as defined in the Code with such additions to such term as may hereafter be made.

“ **Security Agreement** ” is any present or future security agreement pursuant to which any Person pledges its Collateral to Bank as security for the Obligations, including, without limitation, the Guarantor Security Agreement.

“ **Settlement Date** ” is defined in Section 2.2.3.

“ **Stock Pledge Agreement** ” is that certain Stock Pledge Agreement, dated as of March 31, 2011, executed by Borrower in favor of Bank, as amended from time to time.

“ **Streamline Period** ” is, on and after the Effective Date, provided no Event of Default has occurred and is continuing, the period (a) commencing on the first day of the month following the day that Borrower provides to Bank a written report that Borrower has, for each consecutive day in the immediately preceding month, maintained an Adjusted Quick Ratio of at least 1.50 to 1.00, as determined by Bank in its reasonable discretion (the “ **Streamline** ”

Threshold ”); and (b) terminating on the earlier to occur of (i) the occurrence of an Event of Default, and (ii) the first day thereafter in which Borrower fails to maintain the Streamline Threshold, as determined by Bank in its reasonable discretion. Upon the termination of a Streamline Period, Borrower must maintain the Streamline Threshold each consecutive day for one (1) month, as determined by Bank in its reasonable discretion, prior to entering into a subsequent Streamline Period. Borrower shall give Bank prior written notice of Borrower’s election to enter into any such Streamline Period, and each such Streamline Period shall commence on the first day of the monthly period following the date the Bank determines, in its reasonable discretion, that the Streamline Threshold has been achieved.

“ **Subordinated Debt** ” is indebtedness incurred by Borrower subordinated to all of Borrower’s now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

“ **Subsidiary** ” is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower or Guarantor.

“ **Total Liabilities** ” is on any day, all obligations that should, under GAAP, be classified as liabilities on Borrower’s consolidated balance sheet, including all Indebtedness, but excluding all Subordinated Debt.

“ **Trademarks** ” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

“ **Transaction Report** ” is the Bank’s standard reporting package provided by Bank to Borrower.

“ **Transfer** ” is defined in Section 7.1.

“ **Unfinanced Capital Expenditures** ” means, with respect to any Person for any period, the aggregate of all Capital Expenditures by such Person and its Subsidiaries during such period that are not financed or funded using proceeds from (a) the issuance of additional equity interests of Borrower, (b) Subordinated Debt, (c) specific equipment financing, (d) other capital permitted by Bank, and in all instances that are Capital Expenditures as determined in accordance with GAAP, or (e) government grants or other incentives.

“ **Unused Revolving Line Facility Fee**” is defined in Section 2.5(c).

[Signature page follows.]

IN WITNESS WHEREOF , the parties hereto have caused this Agreement to be executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of the Effective Date.

BORROWER:

ASPEN AEROGELS, INC.

By /s/ John F. Fairbanks
Name: John F. Fairbanks
Title: Chief Financial Officer

BANK:

SILICON VALLEY BANK

By /s/ Christopher Leary
Name: Christopher Leary
Title: Vice President

EXHIBIT A – COLLATERAL DESCRIPTION

The Collateral consists of all of Borrower's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, Collateral Accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

all Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (a) more than 65% of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by Borrower of any Foreign Subsidiary which shares entitle the holder thereof to vote for directors or any other matter, (b) any Excluded Accounts, or (c) any Intellectual Property; provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property.

Pursuant to the terms of a certain negative pledge arrangement with Bank, Borrower has agreed not to encumber any of its Intellectual Property without Bank's prior written consent.

EXHIBIT B

COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK
FROM: ASPEN AEROGELS, INC.

Date:

The undersigned authorized officer of Aspen Aerogels, Inc. (“**Borrower**”) certifies that under the terms and conditions of the Amended and Restated Loan and Security Agreement between Borrower and Bank (as amended and in effect, the “**Agreement**”), (1) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below, (2) there are no Events of Default, (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, (4) Borrower, and each of its Subsidiaries, has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.9 of the Agreement, and (5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries, if any, relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank. Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under “Complies” column.

<u>Reporting Covenant</u>	<u>Required</u>	<u>Complies</u>	
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes	No
Quarterly financial statements	Quarterly within 45 days	Yes	No
Annual financial statement (CPA Audited) + CC	FYE within 150 days	Yes	No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes	No
A/R & A/P Agings, inventory reports and Deferred Revenue reports	Monthly within 20 days	Yes	No
Transaction Reports	15 th and last Business Day of each month (monthly within 20 days when a Streamline Period is in effect) and with each request for a Credit Extension;	Yes	No
Projections	FYE within 30 days	Yes	No

The following Intellectual Property was registered after the Effective Date (if no registrations, state “None”)

Financial Covenant

Required

Actual

Complies

Maintain as indicated:

Minimum EBITDA	*	\$	Yes	No
Maximum Unfinanced Capital Expenditures	**	\$	Yes	No

* See Section 6.9(a); ** See Section 6.9(b)

Performance Pricing

Applies

Adjusted Quick Ratio at least 1.50:1.00	Prime + 0.75% (Eligible Accounts) or Prime + 1.25% (Eligible Foreign Accounts and Eligible Inventory); LIBOR + 3.75% (Eligible Accounts) or LIBOR +4.25% (Eligible Foreign Accounts and Eligible Inventory)	Yes	No
Adjusted Quick Ratio less than 1.50:1.00	Prime + 1.25% (Eligible Accounts); Prime + 1.75% (Eligible Foreign Accounts and Eligible Inventory)	Yes	No

The following financial covenant analyses and information set forth in Schedule 1 attached hereto are true and accurate as of the date of this Certificate.

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

ASPEN AEROGELS, INC.

BANK USE ONLY

By: _____
Name: _____
Title: _____

Received by: _____
AUTHORIZED SIGNER
Date: _____
Verified: _____
AUTHORIZED SIGNER
Date: _____

Compliance Status: Yes No

Schedule 1 to Compliance Certificate

Financial Covenants of Borrower

In the event of a conflict between this Schedule and the Loan Agreement, the terms of the Loan Agreement shall govern.

I. EBITDA (Section 6.9(a))

Required: Borrower shall achieve, measured as of the end of each fiscal quarter during the following periods, EBITDA of at least the following:

Period	Minimum EBITDA
Trailing three (3) month period ending September 30, 2014	\$ 1.00
Trailing six (6) month period ending December 31, 2014	\$ 500,000
Trailing nine (9) month period ending March 31, 2015	\$ 500,000
Trailing twelve (12) month period ending June 30, 2015	\$2,500,000
Trailing twelve (12) month period ending September 30, 2015, and each trailing twelve (12) month period thereafter	\$4,500,000

Actual:

A. Net Income	\$
B. To the extent included in the determination of Net Income	
1. The provision for income taxes	\$
2. Depreciation expense	\$
3. Amortization expense	\$
4. Net Interest Expense	\$
5. Non-cash stock compensation expense	\$
6. The sum of lines 1 through 5	\$
C. EBITDA (line A plus line B.6)	

Is line C equal to or greater than \$?

No, not in compliance

Yes, in compliance

II. Maximum Unfinanced Capital Expenditures (Section 6.9(b))

Required: Commencing on July 1, 2014 through each of the following periods, Borrower shall not incur Unfinanced Capital Expenditures (on a cumulative basis beginning on July 1, 2014) in excess of (i) Fifteen Million Dollars (\$15,000,000) through September 30, 2014, (ii) Thirty Million Dollars (\$30,000,000) through December 31, 2014, (iii) Forty Million Dollars (\$40,000,000) through March 31, 2015, (iv) Forty Five Million Dollars (\$45,000,000) through June 30, 2015, and (v) Fifty Million Dollars (\$50,000,000) at all times thereafter.

Actual:

A. Unfinanced Capital Expenditures \$

Are the Unfinanced Capital Expenditures for the period in question less than \$?

No, not in compliance

Yes, in compliance

EXHIBIT C

FORM OF NOTICE OF BORROWING

Date:

To: Silicon Valley Bank
3003 Tasman Drive
Santa Clara, CA 95054
Attention: CFD Operations
Email: CFDOperations@svb.com

RE: Amended and Restated Loan and Security Agreement dated as of August , 2014 (as amended, modified, supplemented or restated from time to time, the “**Loan Agreement**”), by and among **ASPEN AEROGELS, INC.**, a Delaware corporation (“**Borrower**”) and **SILICON VALLEY BANK** (the “**Bank**”)

Ladies and Gentlemen:

The undersigned refers to the Loan Agreement, the terms defined therein and used herein as so defined, and hereby gives you notice irrevocably, pursuant to Section 3.4(a) of the Loan Agreement, of the request for an Advance.

The Funding Date, which shall be a Business Day, of the requested borrowing is , 201 .

The Currency of the requested borrowing is U.S. Dollars.

The aggregate amount of requested Advances is \$.

The requested Advance is being requested with respect to [Eligible Accounts][Eligible Foreign Accounts][Eligible Inventory].

The requested Advances shall consist of \$ of Prime Rate Advances and \$ of LIBOR Advances.

The duration of the Interest Period for the LIBOR Advances included in the requested Advances shall be [one (1)][two (2)][three (3)] month(s).

The undersigned hereby certifies that the following statements are true on the date hereof, and will be true on the date of the proposed Credit Extension before and immediately after giving effect thereto, and to the application of the proceeds therefrom, as applicable:

(a) all representations and warranties of Borrower contained in the Loan Agreement are true, complete and correct in all material respects as of the date hereof; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the

text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(b) no Event of Default has occurred and is continuing, or would result from the disbursement of such proposed Credit Extension.

BORROWER:

ASPEN AEROGELS, INC.

By _____
Name: _____
Title: _____

For internal Bank use only

<u>LIBOR Pricing Date</u>	<u>LIBOR</u>	<u>LIBOR Variance</u>	<u>Maturity Date</u>
		%	

EXHIBIT D

FORM OF NOTICE OF CONVERSION/CONTINUATION

Date:

To: Silicon Valley Bank
3003 Tasman Drive
Santa Clara, CA 95054
Attention: CFD Operations
Email: CFDOperations@svb.com

RE: Amended and Restated Loan and Security Agreement dated as of August , 2014 (as amended, modified, supplemented or restated from time to time, the “**Loan Agreement**”), by and among **ASPEN AEROGELS, INC.**, a Delaware corporation (“**Borrower**”) and **SILICON VALLEY BANK** (the “**Bank**”)

Ladies and Gentlemen:

The undersigned refers to the Loan Agreement, the terms defined therein being used herein as therein defined, and hereby gives you notice irrevocably, pursuant to Section 3.5 of the Loan Agreement, of the [conversion] [continuation] of the Advances specified herein, that:

1. The date of the [conversion] [continuation] is , 20 .
2. The aggregate amount of the proposed Advance to be [converted] [continued] is [\$] .
3. The Loans are to be [converted into] [continued as] [LIBOR] [Prime Rate] Advance.
4. The duration of the Interest Period for the LIBOR Advances included in the [conversion] [continuation] shall be [one (1)][two (2)] [three (3)] month(s).

The undersigned, on behalf of Borrower, hereby certifies that the following statements are true on the date hereof, and will be true on the date of the proposed [conversion] [continuation], before and after giving effect thereto and to the application of the proceeds therefrom:

(a) all representations and warranties of Borrower stated in the Loan Agreement are true, complete and correct in all material respects as of the date hereof; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(b) no Event of Default has occurred and is continuing, or would result from such proposed [conversion] [continuation].

BORROWER:

ASPEN AEROGELS, INC.

By _____
Name: _____
Title: _____

For internal Bank use only

<u>LIBOR Pricing Date</u>	<u>LIBOR</u>	<u>LIBOR Variance</u>	<u>Maturity Date</u>
		%	

Schedule I

- 1** Australia
- 2** Austria
- 3** Belgium
- 4** Brazil
- 5** Chile
- 6** Czech Republic
- 7** Denmark
- 8** Dubai
- 9** Finland
- 10** France
- 11.** Germany
- 12.** Ireland
- 13.** Israel
- 14** Italy
- 15** Japan
- 16** Mexico
- 17** Netherlands
- 18** Norway
- 19** Poland
- 20** Qatar
- 21** Singapore
- 22** South Korea
- 23** Spain
- 24** Sweden
- 25** Switzerland
- 26** Taiwan
- 27** Turkey
- 28** United Arab Emirates (other than with the government of the UAE)
- 29** United Kingdom