

ASPEN AEROGELS INC

FORM FWP

(Free Writing Prospectus - Filing under Securities Act Rules 163/433)

Filed 06/12/14

Address	30 FORBES ROAD BUILDING B NORTHBOROUGH, MA 01532
Telephone	5086911111
CIK	0001145986
Symbol	ASPN
SIC Code	5030 - Lumber And Other Construction Materials
Fiscal Year	12/31

Aspen Aerogels, Inc.

This free writing prospectus relates only to the initial public offering of the shares of common stock described below and should be read together with the preliminary prospectus, subject to completion, dated June 2, 2014 (the "Preliminary Prospectus") included in Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-195523) of Aspen Aerogels, Inc. (the "Company"), relating to its initial public offering of common stock. On June 12, 2014, we filed Amendment No. 5 to the Registration Statement, which can be accessed through the following link: <http://www.sec.gov/Archives/edgar/data/1145986/000119312514234297/d627478ds1a.htm>

This free writing prospectus contains information set forth in Amendment No. 5 and updates and supersedes the information in the Preliminary Prospectus to the extent that it is inconsistent therewith. All references to captions correspond to the Preliminary Prospectus unless otherwise specified. The information in this free writing prospectus and Amendment No. 5 updates the Preliminary Prospectus to reflect (i) the receipt by the Company of a threat of litigation from an existing stockholder, and (ii) the waiver by one of the Company's principal stockholders of the right to vote any shares they hold in excess of 14.9% of the total outstanding shares of the Company. **YOU SHOULD READ AMENDMENT NO. 5 CAREFULLY BEFORE DECIDING TO INVEST IN OUR COMMON STOCK.**

The following summarizes the updated information contained in Amendment No. 5 and supplements and updates the information contained in the Preliminary Prospectus.

The disclosure set forth in the Preliminary Prospectus under "Business — Legal Proceedings." has been revised by replacing the entire paragraph with:

In the ordinary course of our business we may be party to various legal proceedings, including but not limited to those brought by our current or former employees, stockholders, customers, suppliers and competitors, the outcome of which cannot be predicted with certainty. On June 10, 2014, we received an email threatening litigation from an existing stockholder regarding his prior investments in us and his participation in our past financings, but to the knowledge of our management, no action has yet been taken by such stockholder with respect to his claims. We are not involved in any legal proceedings that are expected to have a material adverse effect on our business, results of operations or financial condition. To the knowledge of our management, no legal proceedings of a material nature involving us are pending or threatened by any individuals, entities or governmental authorities.

The disclosure set forth in the Preliminary Prospectus has been updated by inserting the following as (i) a new second sentence in footnote 6 to the principal stockholders table in "Principal Stockholders," (ii) a new third paragraph under "Description of Capital Stock — Common Stock," and (iii) a new second paragraph under "Certain Relationships and Related Person Transactions — Agreements with Stockholders:"

In June 2014, we entered into an agreement with the Fidelity Funds by which they waived the right to vote with respect to any shares they or their affiliates possess in excess of 14.9% of our total outstanding shares. Such agreement will terminate automatically once the Fidelity Funds and their affiliates own 14.89% or less of our outstanding common stock.

The disclosure set forth in the Preliminary Prospectus under "Risk Factors — Risks Related to Our Common Stock and This Offering — Anti-takeover provisions in our restated certificate of incorporation and restated by-laws, and Delaware law, could delay or discourage a takeover." has been revised by inserting the following as a new second paragraph:

Further, as a result of the agreement we entered into with the Fidelity Funds in June 2014 whereby the Fidelity Funds have waived their right to vote with respect to any shares they or their affiliates possess in excess of 14.9% of our total outstanding shares, it could be more difficult for stockholders to achieve any specific percentage voting threshold. See "Description of Capital Stock — Common Stock."

The Company has filed a registration statement (including a prospectus) with the Securities and Exchange Commission (the "SEC") for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement for more complete information about the Company and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, a copy of the prospectus may be obtained from the offices of: Barclays Capital Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717, or by email at: barclaysprospectus@broadridge.com, or by telephone: (888) 603-5847; J.P. Morgan Securities LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717 or by calling tolling-free at 1-866-803-9204; and Citigroup Global Markets Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717 (Tel: 800-831-9146). You may obtain a copy of the most recent amendment to the registration statement at <http://www.sec.gov/Archives/edgar/data/1145986/000119312514234297/d627478ds1a.htm>