



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

May 21, 2009

Via U.S. mail and facsimile

Mr. Duncan J. Palmer
Chief Financial Officer
Owens Corning
One Owens Corning Parkway
Toledo, Ohio 43659

RE: Form 10-K for the fiscal year ended December 31, 2008
Form 10-Q for the period ended March 31, 2009
File No. 1-33100

Dear Mr. Palmer:

We have reviewed your response letter dated May 11, 2009 and have the following additional comments. If you disagree with our comment, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2008

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings.

Management's Discussion and Analysis

Critical Accounting Estimates

Impairment of Assets, page 44

2. We note your response to prior comment 2. Please address the following:
 - Please consider disclosing the number of reporting units you have as well what these reporting units are; and
 - You discuss some of the material estimates and assumptions used in your analysis which include cash flow forecasts, discount rates, and terminal business values. In a similar manner to your discussion of the terminal business value and corresponding long-term growth factor, please consider performing a sensitivity analysis of the other estimates and assumptions based upon reasonably likely changes and disclose whether these reasonably likely changes could lead to a goodwill impairment.

Pensions and Other Postretirement Benefits, page 45

3. We note your response to prior comment 4. The expected return on plan assets assumption is derived by taking into consideration the current plan asset allocation, historical rates of return on those assets, and projected future asset class returns. An asset return model is used to develop an expected range of returns on plan investments over a 20 year period, with the expected rate of return selected from a best estimate range within the total range of projected results. Please help us better understand how your use of a 8.00% expected rate of return continues to be appropriate in light of your plan asset allocations. Refer to paragraph 5(d)(3) of SFAS 132(R). In this regard, please address the following:
 - Based on your actual and target plan asset allocations as of December 31, 2007, please explain how you determined that a 8.00% expected rate of return for 2008 would be appropriate. Please provide us with a summary of the analysis you performed which should include your expected rate of return by each asset category as of December 31, 2007; and
 - Based on your actual and target allocations as of December 31, 2008, please explain how you determined that a 8.00% expected rate of return would be appropriate for 2009. Please provide us with a summary of the analysis you performed which should include your expected rate of return by each asset category as of December 31, 2008.

FORM 10-Q FOR THE PERIOD ENDED MARCH 31, 2009

General

4. Please address the above comments in your interim filings as well.

Financial Statements

Notes to the Financial Statements

Note 2. Segment Information, page 5

5. In the first quarter of 2009, the chief operating decision maker fully implemented the structure of assessing performance and allocating resources based on two operating segments, Composites and Building Materials. Beginning in the second half of 2008, certain organization structure and other changes were made by the chief operating decision maker to facilitate managing the business from two operating segments. These changes, which became fully functional in the first quarter 2009, included the hiring of a Building Materials Group President, restructuring your incentive compensation plan for 2009, and changing the reporting structure of the chief operating decision maker's leadership team. Please explain to us the specific changes made to the organization and reporting structure which led to your determination that you now only have two operating segments pursuant to paragraph 10 of SFAS 131. Your response should address whether there were also changes made as to who represented the chief operating decision maker per paragraph 12 of SFAS 131 as well as whether there were changes in the financial information given to the chief operating decision maker to make decisions about resources to be allocated and to assess performance. The financial information provided and corresponding discussion beginning on page 33 indicates that the financial information of each of the businesses in the Building Materials segment continues to be reviewed and would need to continue to be reviewed given the different trends in each business. In this regard, please help us understand how your chief operating decision maker can assess performance and make decisions regarding the allocation of resources by viewing operations at your new operating segment level. Please also address whether there were any changes in your determination of reporting units pursuant to SFAS 142.

* * * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a supplemental response letter that keys your responses to our comments and provides any requested supplemental information. Detailed letters greatly facilitate our review. Please file your supplemental

Mr. Duncan J. Palmer

May 21, 2009

Page 4 of 4

response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Edward M. Kelly, Senior Counsel, at (202) 551-3728 or, in his absence, Craig E. Slivka, Special Counsel, at (202) 551-3729 if you have any questions regarding legal matters. Please contact Nudrat Salik, Staff Accountant, at (202) 551-3692 or, in her absence, to the undersigned at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker
Accounting Branch Chief