



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

May 25, 2011

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

**RE: Form 10-K for the Fiscal Year ended December 31, 2010
Form 10-Q for the Fiscal Quarter ended March 31, 2011
File No. 1-33100**

Dear Mr. Palmer:

We have limited our review to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2010

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.

Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 22

Results of Operations, page 23

2. When multiple factors contribute to fluctuations in a single financial statement line item, please separately quantify the impact of each factor. You should also ensure that you are explaining the majority of increases or decreases in each line

item. For example, it is unclear how significantly your net sales were favorably impacted by changes in volume as opposed to changes in selling prices. This is not meant to be an all-inclusive list of where improvements could be made to expand your explanations. Please revise your MD&A accordingly to separately quantify the specific reasons for fluctuations between all periods presented wherever possible.

3. We note your disclosure on page 10 that due to your international operations, you are subject to currency exchange rate fluctuations between the United States dollar and foreign currencies. As such, please expand your discussion of results of operations to disclose for each period presented the impact that foreign currency translations had on your results of operations, including separate presentation of the impact on your revenues and expenses.

Liquidity, Capital Resources and Other Related Matters, page 30

Cash Flows, page 31

4. Please expand your disclosure to discuss all material changes in your operating activities, investing activities and financing activities as depicted in your statement of cash flows. Your discussion should focus on the primary drivers of and other material factors necessary to an understanding of your cash flows and the indicative value of historical cash flows. Please refer to the SEC Interpretive Release No. 33-8350.

Financial Statements

Note 18 – Contingent Liabilities and Other Matters, page 82

Litigation, page 82

5. It is not clear what judgment was affirmed by the United States Court of Appeals for the Sixth Circuit on September 27, 2010. Please revise your disclosure to clarify. If this judgment was not favorable for the Company, please also revise your disclosures to indicate whether or not there is a reasonable possibility that a loss exceeding amounts already recognized may have been incurred and the amount of that additional loss is material. To the extent you are not able to estimate the reasonably possible loss in excess of amounts accrued, please provide us with a specific and comprehensive discussion as to why you cannot make such estimate and what procedures are in place on a quarterly basis to attempt to determine such an estimate. If you do determine that there is at least a reasonable possibility that a loss may have been incurred, you should disclose this and also

the amount of that loss or range of possible loss or state that such a loss cannot be estimated. Refer to ASC 450-20-50.

Environmental Matters, page 82

6. We note you have environmental remediation liabilities at 19 sites and have estimated a reserve for such liabilities of \$9 million as of December 31, 2010. Please confirm there is not a reasonable possibility that a loss exceeding amounts already recognized may have been incurred and the amount of that additional loss is material. To the extent you are not able to estimate the reasonably possible loss in excess of amounts accrued, please provide us with a specific and comprehensive discussion as to why you cannot make such estimate and what procedures are in place on a quarterly basis to attempt to determine such an estimate. If you do determine that there is at least a reasonable possibility that a loss may have been incurred, you should disclose this and also the amount of that loss or range of possible loss or state that such a loss cannot be estimated. Refer to ASC 450-20-50.

FORM 10-Q FOR THE PERIOD ENDED MARCH 31, 2011

General

7. Please address the above comments in your interim filings as well, as applicable.

* * * *

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

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- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Jeffrey Gordon, Staff Accountant, at (202) 551-3866 or, in his absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691 if you have questions regarding these comments.

Sincerely,

Rufus Decker
Accounting Branch Chief