



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

January 19, 2010

via U.S. mail and facsimile

Michael D. Lockhart, Chairman and CEO
Armstrong World Industries, Inc.
P.O. Box 3001
Lancaster, Pennsylvania 17604

**RE: Armstrong World Industries, Inc.
 Form 10-K for the Fiscal Year Ended December 31, 2008
 Filed February 26, 2009
 Forms 10-Q for the Fiscal Quarters Ended March 31, 2009,
 June 30, 2009 and September 30, 2009
 Schedule 14A Filed on April 27, 2009
 File No. 1-2116**

Dear Mr. Lockhart:

We have reviewed your response letter dated January 13, 2010, and have the following additional comments. Where indicated, we think you should revise your document in future filings in response to these comments. If you disagree, 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. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2008

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 21

Critical Accounting Estimates, page 26

U.S. Pension Credit and Postretirement Benefit Costs, page 21

1. In future filings, please disclose the period for which the historical annualized rate of return is calculated for purposes of estimating the expected rate of return on plan assets (e.g., the annualized rate of return for the 20 year period ended December 31, 2008).

Form 10-Q for the Fiscal Quarter Ended September 30, 2009

Note 2. Segment Results, page 12

2. We note the disclosures you intend to include in future filings in response to comments 3 and 5 in our letter dated December 17, 2009. In this regard, we note that your discussion for estimating the fair value of the tangible assets in the European Resilient Flooring business' tangible assets with a carrying value of \$53.9 million as of September 30, 2009, is focused on the land and building assets. In future filings, please disclose the percentage land and buildings represents of the European Resilient Flooring business' tangible assets. To the extent that there are other material assets comprising this business' tangible assets, please provide investors with a detailed explanation about how management estimated the fair value of these assets as well.

Schedule 14A Filed on April 27, 2009

Compensation Discussion and Analysis, page 19

3. We note your responses to comments seven through 11 in our letter dated December 17, 2009. In future filings containing executive compensation disclosure, please provide at least the same level of detail in your compensation discussion and analysis as you provided in your responses to the aforementioned comments.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter on EDGAR that keys your responses to our comments and provides any requested information. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, John Hartz, Senior Assistant Chief Accountant, at (202) 551-3689, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters. For other comments, please contact Dieter King, Staff Attorney, at (202) 551-3338.

Sincerely,

Terence O'Brien
Accounting Branch Chief