



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

DIVISION OF
CORPORATION FINANCE

December 18, 2012

Via E-mail

Thomas B. Mangas

CFO

Armstrong World Industries, Inc.

2500 Columbia Avenue

Lancaster, Pennsylvania 17603

**Re: Armstrong World Industries, Inc.
Form 10-K for Fiscal Year Ended December 31, 2011
Filed February 27, 2012
Form 10-Q for Fiscal Quarter Ended September 30, 2012
Filed October 29, 2012
File No. 1-2116**

Dear Mr. Mangas:

We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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 Fiscal Year Ended December 31, 2011

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Critical Accounting Estimates, page 20

U.S. Pension Credit and Postretirement Benefit Costs, page 20

1. In future filings, please expand your discussion and analysis of the changes in the material assumptions impacting pension expense (e.g., discount rate and estimated long-term return on plan assets) to explain to investors how the changes led to the recognition of a pre-tax actuarial loss of \$98.2 million for the US pension plans. In this regard, we note that the pension and postretirement adjustments adversely impacted 2011 comprehensive income by 88%. Material adjustments to comprehensive income should be fully explained.

Results of Operations, page 24

2. In future filings, please quantify the extent to which increases/decreases in volumes sold, increases/decreases in prices, and raw material inflation pass-through contributed to the increase or decrease in net sales, gross profit margin, and operating income at the consolidated and segment levels. Please refer to Items 303(a)(3)(iii), and 303(a)(3)(iv) of Regulation S-K for guidance. In addition, please quantify the impact of other factors you identified that contributed to fluctuations in the line items impacting earnings. Please refer to Item 303(a)(3)(i) of Regulation S-K and Section 501.12.b.3 of the Financial Reporting Codification for guidance.

Contractual Obligations, page 33

3. In future filings, please revise your contractual obligations table to provide information in the table or in the footnotes to the table that will allow an investor to understand the amount of your pension and postretirement obligations and the timing of the expected contributions. While we understand that there may be uncertainty that can affect the determination of future minimum statutory funding requirements and expected contributions, it may be possible to develop estimates based on conditions that exist at the balance sheet date. In this regard, you would need to disclose the factors that could affect the estimates of the expected contributions. We also note the \$29.2 million of expected 2012 contributions disclosed on page 74. Please refer to Item 303(a)(5) of Regulation S-K for guidance.

Form 10-Q for Fiscal Quarter Ended September 30, 2012

Note 11. Income Tax Expense, page 14

4. We note that the release of the valuation allowance for your foreign tax credits during fiscal year 2012 was a factor in the decline in your effective tax rate from 42.8% to 29.1%. This lower rate had a 19% positive impact on 2012 earnings from continuing operations. For each specific foreign tax credit deferred tax asset for which you changed the accompanying valuation allowance in 2012, please:
 - Quantify the gross amounts of the foreign tax credit deferred tax asset by jurisdiction as of December 31, 2011;
 - Describe the original transactions that generated each foreign tax credit deferred tax asset;
 - Quantify the valuation allowance recognized as of December 31, 2011 for each foreign tax credit deferred tax asset by jurisdiction;
 - Describe the specific positive and negative factors you considered as of December 31, 2011 in establishing the valuation allowance for each foreign tax credit deferred tax asset;
 - Describe the transactions that caused any changes in the amount of the gross foreign tax credit deferred tax asset recognized from the end of fiscal year 2011 through September 30, 2012;
 - Describe in detail, by jurisdiction, the specific changes in your tax planning strategies that you now believe will enable you to realize each foreign tax credit deferred tax asset

along with the changes in facts and circumstances that prompted you to develop these new tax planning strategies; and,

- Describe any objective evidence that supports your ability to implement the tax planning strategies – compliance with ASC 740-10-30-16 – 30-25 and ASC 740-10-55-39 – 55-48 should be clearly evident.

If you wish to have this information treated as confidential, please refer to Freedom of Information Act Rule 200.83. Please refer to Rule 418 of the Securities Act and Rule 12b-4 of the Exchange Act if you plan to seek return of this information. In order to facilitate the return of the confidential information, please include a self-addressed, postage paid package. Alternatively you may request that we shred and dispose of the materials. In preparing the confidential treatment request, you may wish to refer to our February 28, 1997, Staff Legal Bulletin 1 and our July 11, 2001, Staff Legal Bulletin 1A that are available on the Commission's website at <http://www.sec.gov>.

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 the 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
- 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 Tracey Smith, Staff Accountant, at (202) 551-3736, or in her absence, Al Pavot, Staff Accountant, at (202) 551-3738, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Accounting Branch Chief