

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

DIVISION OF CORPORATION FINANCE

May 3, 2017

Mail Stop 4631

<u>Via E-mail</u> Brian L. MacNeal Senior Vice President Armstrong World Industries, Inc. 2500 Columbia Avenue Lancaster, Pennsylvania 17603

> Re: Armstrong World Industries, Inc. Form 10-K for Fiscal Year Ended December 31, 2016 Filed February 27, 2017 File No. 1-02116

Dear Mr. MacNeal:

We have reviewed your filing and have the following 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2016

Results of Operations, page 23

1. Please expand your discussion of total other comprehensive income to more fully explain the actuarial gains and losses related to your pension plans such that you reported a net gain of \$49.3 million in pension and postretirement adjustments for fiscal year 2016. Explain how the changes in your material underlying assumptions led to the recognition of a net gain. In this regard, we note from your disclosure on page 20, that you recognized an \$81.8 million decrease in net actuarial losses related to your U.S. pension benefit plans in 2016 primarily due to changes in actuarial assumptions (most significantly a 28 basis point decrease in the discount rate) and the amortization of net actuarial losses recorded as a component of 2016 net periodic cost. Explain how the decrease in your discount rate resulted in a decrease in net actuarial losses. Brian L. MacNeal Armstrong World Industries, Inc. May 3, 2017 Page 2

Financial Statements

Consolidated Statements of Earnings and Comprehensive Income (Loss), page 40

Note 3- Nature of Operations, page 48

2. Please expand your disclosure to provide the entity-wide information about your products required by ASC 280-10-50-40. For instance, we note disclosure elsewhere that your Tectum acquisition will fall under your architectural specialties product line.

Form 8-K February 27, 2017

Exhibit 99.1 Press Release

Market Outlook and 2017 Guidance

3. We note you disclose expectations of Adjusted EBITDA, Adjusted EPS, and Free Cash Flow for 2017 without presenting and reconciling to corresponding GAAP amounts. Please revise your disclosures pursuant to the guidance provided in Question 102.10 of the updated Compliance and Disclosure Interpretations issued on May 17, 2016. Address this comment as it relates to your disclosures in your Earnings Call Presentation in Exhibit 99.2 and your Investor Presentation in Exhibit 99.3.

Supplemental Reconciliations of GAAP to non-GAAP Results

- 4. Please disclose the nature of your non-cash impact of U.S. Pension adjustment. Also, please do not characterize the pension adjustment as "non-cash," as pension obligations ultimately settle in cash.
- 5. We note you present two reconciliations of Earnings (loss) from continuing operations, reported to Adjusted EBITDA. Please fully explain each adjustment reflected in the second reconciliation. In this regard, items such as pre-tax adjustment items, reversal of adjusted expenses, and ordinary tax are just a few line items that warrant an explanation of what the adjustment represents and how such amount was determined.

Exhibit 99.2 Earnings Call Presentation

Basis of Presentation, page 3

6. You identify the items that are adjusted for comparable dollars and other adjustments and indicate that these adjustments result in non-GAAP measures. In accordance with Regulation G, please provide the most comparable GAAP measures and provide a quantitative reconciliation of each non-GAAP measure to the most comparable GAAP measure. In addition, in order to avoid confusion to readers, please ensure you appropriately label your non-GAAP measures throughout your presentation.

Brian L. MacNeal Armstrong World Industries, Inc. May 3, 2017 Page 3

Specifically, please label the net sales, gross profit, operating income, EBITDA and earnings per share line items you have presented "as adjusted" or something similar so that readers do not confuse these measures with GAAP amounts. Please address this comment as it relates to your presentation of non-GAAP measures in your Investor Presentation found in Exhibit 99.3.

Cash Flow Reconciliation, page 17

7. Your computation of free cash flow differs from the typical calculation (cash flows from operating activities as presented in the statement of cash flows under GAAP, less capital expenditures). Therefore, please revise the title of this non-GAAP measure so it is not confused with free cash flow as typically calculated. See Question 102.07 of the Non-GAAP Compliance and Disclosure Interpretations. Please address this comment as it relates to your presentation of free cash flow in your Investor Presentation found in Exhibit 99.3.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Tracie Mariner, Staff Accountant, at (202) 551-3744, or Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691, if you have questions regarding comments on the financial statements and related matters. You may contact me at (202) 551-3355 with any other questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien Branch Chief Office of Manufacturing and Construction