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

FORM 10-Q

(Mark One)

ý **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2017
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number **001-11595**

Astec Industries, Inc.

(Exact name of registrant as specified in its charter)

Tennessee	**62-0873631**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1725 Shepherd Road, Chattanooga, Tennessee	**37421**
(Address of principal executive offices)	(Zip Code)

(423) 899-5898
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
YES ý NO ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
YES ý NO ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer ý	Accelerated Filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller Reporting Company ☐
Emerging Growth Company ☐	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
YES ☐ NO ý

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at April 20, 2017
Common Stock, par value $0.20	**23,060,484**

ASTEC INDUSTRIES, INC.
INDEX

PART I -- FINANCIAL INFORMATION
Item 1. Financial Statements

Astec Industries, Inc.
Condensed Consolidated Balance Sheets
(in thousands)
(unaudited)

	March 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 55,401	$ 82,371
Investments	1,408	1,024
Trade receivables	151,538	106,659
Other receivables	4,684	4,014
Inventories	372,570	360,404
Prepaid expenses and other	20,731	22,361
Total current assets	606,332	576,833
Property and equipment, net	182,223	180,538
Investments	13,734	13,965
Goodwill	41,047	40,804
Other long-term assets	31,152	31,461
Total assets	$ 874,488	$ 843,601
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	$ 697	$ 4,632
Current maturities of long-term debt	2,717	2,538
Accounts payable	73,806	57,297
Income tax payable	8,193	747
Accrued product warranty	13,719	13,156
Customer deposits	38,949	39,102
Accrued payroll and related liabilities	18,006	25,693
Accrued loss reserves	2,720	2,852
Other current liabilities	25,828	22,844
Total current liabilities	184,635	168,861
Long-term debt	3,599	4,116
Deferred income tax liabilities	1,630	1,669
Other long-term liabilities	20,274	20,114
Total liabilities	210,138	194,760
Shareholders' equity	663,025	647,830
Non-controlling interest	1,325	1,011
Total equity	664,350	648,841
Total liabilities and equity	$ 874,488	$ 843,601

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Income
(in thousands, except per share data)
(unaudited)

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Net sales	$ 318,401	$ 278,721
Cost of sales	242,630	206,765
Gross profit	75,771	71,956
Selling, general, administrative and engineering expenses	53,121	43,806
Income from operations	22,650	28,150
Interest expense	265	467
Other income, net of expenses	512	544
Income from operations before income taxes	22,897	28,227
Income taxes	7,817	10,549
Net income	15,080	17,678
Net loss attributable to non-controlling interest	(40)	(65)
Net income attributable to controlling interest	$ 15,120	$ 17,743
Earnings per common share		
Net income attributable to controlling interest:		
Basic	$ 0.66	$ 0.77
Diluted	$ 0.65	$ 0.77
Weighted average number of common shares outstanding:		
Basic	23,013	22,965
Diluted	23,176	23,135
Dividends declared per common share	$ 0.10	$ 0.10

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Comprehensive Income
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2017	2016
Net income	$ 15,080	$ 17,678
Other comprehensive income:		
Foreign currency translation adjustments	2,030	1,730
Income tax provision on foreign currency translation adjustments	--	(335)
Other comprehensive income	2,030	1,395
Comprehensive income	17,110	19,073
Comprehensive income attributable to non-controlling interest	8	60
Comprehensive income attributable to controlling interest	$ 17,102	$ 19,013

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2017	2016
Cash flows from operating activities:		
Net income	$ 15,080	$ 17,678
Adjustments to reconcile net income to net cash provided (used) by operating activities:		
Depreciation and amortization	6,411	5,870
Provision for doubtful accounts	436	289
Provision for warranties	3,996	3,615
Deferred compensation provision (benefit)	(376)	380
Stock-based compensation	1,017	511
Gain on disposition of fixed assets	(133)	(71)
Distributions to SERP participants	(123)	(92)
Change in operating assets and liabilities:		
Sale (purchase) of trading securities, net	406	(678)
Trade and other receivables	(45,910)	(17,667)
Inventories	(12,166)	(4,728)
Prepaid expenses	778	(4,042)
Other assets	(377)	1,384
Accounts payable	16,276	8,193
Accrued payroll and related expenses	(7,687)	(975)
Accrued product warranty	(3,460)	(2,357)
Customer deposits	(154)	22,138
Prepaid and income taxes payable, net	7,877	9,745
Other	3,387	5,870
Net cash provided (used) by operating activities	(14,722)	45,063
Cash flows from investing activities:		
Expenditures for property and equipment	(5,406)	(5,054)
Proceeds from sale of property and equipment	140	111
Other	(292)	(12)
Net cash used by investing activities	(5,558)	(4,955)
Cash flows from financing activities:		
Payment of dividends	(2,306)	(2,304)
Borrowings under bank loans	--	1,394
Repayments of bank loans	(4,601)	(1,120)
Sale (purchase) of Company shares held by SERP, net	285	(20)
Withholding tax paid upon vesting of restricted stock units	(501)	(1,022)
Net cash used by financing activities	(7,123)	(3,072)
Effect of exchange rates on cash	433	347
Net increase (decrease) in cash and cash equivalents	(26,970)	37,383
Cash and cash equivalents, beginning of period	82,371	25,062
Cash and cash equivalents, end of period	$ 55,401	$ 62,445

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statement of Equity
For the Three Months Ended March 31, 2017
(in thousands)
(unaudited)

	Common Stock Shares	Common Stock Amount	Additional Paid-in-Capital	Accum-ulated Other Compre-hensive Loss	Company Shares Held by SERP	Retained Earnings	Non-controlling Interest	Total Equity
Balance, December 31, 2016	23,046	$ 4,609	$ 139,970	$ (31,562)	$ (1,958)	$ 536,771	$ 1,011	$ 648,841
Net income	--	--	--	--	--	15,120	(40)	15,080
Other comprehensive income	--	--	--	2,030	--	--	--	2,030
Change in ownership percentage of subsidiary	--	--	--	--	--	--	184	184
Dividends declared	--	--	2	--	--	(2,308)	--	(2,306)
Stock-based compensation	--	--	567	--	--	--	--	567
Stock issued under incentive plans	14	3	(3)	--	--	--	--	--
Withholding tax paid upon vesting of RSUs	--	--	(501)	--	--	--	--	(501)
SERP transactions, net	--	--	162	--	123	--	--	285
Other	--	--	--	--	--	--	170	170
Balance, March 31, 2017	23,060	$ 4,612	$ 140,197	$ (29,532)	$ (1,835)	$ 549,583	$ 1,325	$ 664,350

See Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X promulgated under the Securities Act of 1933. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles ("U.S. GAAP") for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three-month period ended March 31, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. It is suggested that these unaudited condensed consolidated financial statements be read in conjunction with the financial statements and the notes thereto included in the Astec Industries, Inc. Annual Report on Form 10-K for the year ended December 31, 2016.

The unaudited condensed consolidated balance sheet as of December 31, 2016 has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements.

Dollar and share amounts shown are in thousands, except per share amounts, unless otherwise specified.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ('FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers", which supersedes existing revenue guidance under U.S. GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The implementation of this new standard will require companies to use more judgment and to make more estimates than under current guidance. The standard, as amended, is effective for public companies for annual periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018. Due to the decentralized structure of the Company, corporate management requested documented revenue streams from its 16 manufacturing subsidiaries to assist in its effort to determine the effect the new standard will have on its financial reporting. A meeting was also held in September 2016 with corporate management, controllers of the manufacturing subsidiaries and an outside revenue expert to further review the Company's various revenue streams and the change in timing of when revenue may be recognized under the new guidance. The Company is still in the process of finalizing this review. Therefore, the Company has not yet determined the extent of the impact adoption of this new standard will have on the Company's financial position or results of operations.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments - Overall (Subtopic 825-10)", which requires, among other things, equity investments with readily determinable fair values, except those accounted for under the equity method of accounting or those that result in consolidation of the investee, to be measured at fair value with changes in fair value recognized in net income. The standard is effective for public companies in fiscal years beginning after December 15, 2017, and the Company expects to adopt the standard effective January 1, 2018. The Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)", which significantly changes the accounting for operating leases by lessees. The accounting applied by lessors is largely unchanged from that applied under previous guidance. The new guidance requires lessees to recognize lease assets and lease liabilities in the balance sheet, initially measured at the present value of the lease payments, for leases which were classified as operating leases under previous guidance. Lease cost included in the statement of income will be calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. Lessees may make an accounting policy election to exclude leases with a term of 12 months or less from the requirement to record related assets and liabilities. The new standard is effective for public companies for fiscal years beginning after December 15, 2018. The Company plans to adopt the new standard effective January 1, 2019. The Company does not expect the adoption of this standard to have a material impact on its results of operations; however, the Company has not determined the impact the adoption of this new standard will have on its financial position.

In March 2016, the FASB issued ASU No. 2016-08, "Revenue from Contracts with Customers (Topic 606)", which does not change the core principles of ASU No. 2014-09 discussed above, but rather clarifies the implementation guidance in order to eliminate the potential for diversity in practice arising from inconsistent application of the principal versus agent guidance. Under the new guidance, when an entity determines it is a principal in a transaction, the entity recognizes revenue in the gross amount of consideration; however in transactions where an entity determines it in an agent, the entity recognizes revenue in the amount of any fee or commission to which it expects to be entitled. The standard is effective for public companies for annual periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018. The Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position or results of operations.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments". The standard changes how credit losses are measured for most financial assets and certain other instruments that currently are not measured through net income. The standard will require an expected loss model for instruments measured at amortized cost as opposed to the current incurred loss approach. In valuing available for sale debt securities, allowances will be required to be recorded, rather than the current approach of reducing the carrying amount, for other than temporary impairments. A cumulative adjustment to retained earnings is to be recorded as of the beginning of the period of adoption to reflect the impact of applying the provisions of the standard. The standard is effective for public companies for periods beginning after December 15, 2019 and the Company expects to adopt the new standard as of January 1, 2020. The Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position or results of operations.

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)" which clarifies how certain cash receipts and cash payments should be presented on the statement of cash flows. The statement also addresses how the predominance principle should be applied when cash payments have aspects of more than one class of cash flows. The standard is effective for public companies in fiscal years beginning after December 15, 2017, and the Company expects to adopt the standard effective January 1, 2018. The Company has not determined the impact, if any, the adoption of this new standard will have on the Company's statement of cash flows.

In October 2016, the FASB issued ASU No. 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory," which requires companies to account for the income tax effects of intercompany sales and transfers of assets other than inventory, such as intangible assets, when the transfer occurs. This is a change from current guidance, which requires companies to defer the income tax effects of intercompany transfers of assets until the asset has been sold to an outside party or otherwise recognized by being depreciated, amortized, or impaired. The new guidance will require companies to defer the income tax effects of only intercompany transfers of inventory. The standard is effective for public companies in fiscal years beginning after December 15, 2018. Early adoption is permitted as of the beginning of an annual period and requires companies to apply a modified retrospective approach. The Company plans to adopt the new standard effective January 1, 2019. The Company has not yet determined what impact the adoption of this new standard will have on the Company's financial position or results of operations.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805), Clarifying the Definition of a Business," which provides additional guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The standard is effective for public companies for annual or interim periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018. The Company does not expect the application of this standard to have a material impact on its financial position, results of operations or cash flows.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles-Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment," which eliminates Step 2 from the goodwill impairment test for public companies. Currently, Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The new guidance stipulates that an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value, up to the amount of goodwill allocated to the reporting unit. The standard is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019 with early adoption permitted. The Company plans to early adopt this standard for its annual impairment testing to be performed as of December 31, 2017. The Company does not expect the application of this standard to have a material impact on its financial position, results of operations or cash flows.

Note 2. Earnings per Share

Basic earnings per share are determined by dividing earnings by the weighted average number of common shares outstanding during each period. Diluted earnings per share include the potential dilutive effect of restricted stock units and shares held in the Company's Supplemental Executive Retirement Plan.

The following table sets forth the computation of net income attributable to controlling interest and the number of basic and diluted shares used in the computation of earnings per share:

	Three Months Ended March 31,	
	2017	2016
Numerator:		
Net income attributable to controlling interest	$ 15,120	$ 17,743
Denominator:		
Denominator for basic earnings per share	23,013	22,965
Effect of dilutive securities:		
Restricted stock units	102	106
Supplemental Executive Retirement Plan	61	64
Denominator for diluted earnings per share	23,176	23,135

Note 3. Receivables

Receivables are net of allowances for doubtful accounts of $1,624 and $1,511 as of March 31, 2017 and December 31, 2016, respectively.

Note 4. Inventories

Inventories consist of the following:

	March 31, 2017	December 31, 2016
Raw materials and parts	$ 145,101	$ 137,763
Work-in-process	128,027	115,613
Finished goods	77,932	84,898
Used equipment	21,510	22,130
Total	$ 372,570	$ 360,404

Raw material inventory is comprised of purchased steel and other purchased items for use in the manufacturing process or held for sale for the after-market parts business. The category also includes the manufacturing cost of completed equipment sub-assemblies produced for either integration into equipment manufactured at a later date or for sale in the Company's after-market parts business.

Work-in-process inventory consists of the value of materials, labor and overhead incurred to date in the manufacturing of incomplete equipment or incomplete equipment sub-assemblies being produced.

Finished goods inventory consists of completed equipment manufactured for sale to customers.

Used equipment inventory consists of equipment accepted in trade or purchased on the open market. The category also includes equipment rented to prospective customers on a short-term or month-to-month basis. Used equipment is valued at the lower of acquired or trade-in cost or net realizable value determined on each separate unit.

Inventories are valued at the lower of cost (first-in, first-out) or net realizable value, which requires the Company to make specific estimates, assumptions and judgments in determining the amount, if any, of reductions in the valuation of inventories to their net realizable values. The net realizable values of the Company's products are impacted by a number of factors, including changes in the price of steel, competitive sales pricing, quantities of inventories on hand, the age of the individual inventory items, market acceptance of the Company's products, actions by our competitors, the condition of our used and rental inventory and general economic factors. Once an inventory item's value has been deemed to be less than cost, a net realizable value allowance is calculated and a new "cost basis" for that item is effectively established. This new cost is retained for that item until such time as the item is disposed of or the Company determines that an additional write-down is necessary. Additional write-downs may be required in the future based upon changes in assumptions due to general economic downturns in the markets in which the Company operates, changes in competitor pricing, new product design or other technological advances introduced by the Company or its competitors and other factors unique to individual inventory items.

The most significant component of the Company's inventory is steel. A significant decline in the market price of steel could result in a decline in the market value of the equipment or parts we sell. During periods of significant declining steel prices, the Company reviews the valuation of its inventories to determine if reductions are needed in the recorded value of inventory on hand to its net realizable value.

The Company reviews the individual items included in its finished goods, used equipment and rental equipment inventory on a model-by-model or unit-by-unit basis to determine if any item's net realizable value is below its carrying value. This analysis is expanded to include items in work-in-process and raw material inventory if factors indicate those items may also be impacted. In performing this review, judgments are made and, in addition to the factors discussed above, additional consideration is given to the age of the specific items of used or rental inventory, prior sales offers or lack thereof, the physical condition of the specific items and general market conditions for the specific items. Additionally, an analysis of raw material inventory is performed to calculate reserves needed for obsolete inventory based upon quantities of items on hand, the age of those items and their recent and expected future usage or sale.

When the Company determines that the value of inventory has become impaired through damage, deterioration, obsolescence, changes in price levels, excessive levels of inventory or other causes, the Company reduces the carrying value to the net realizable value based on estimates, assumptions and judgments made from the information available at that time. Abnormal amounts of idle facility expense, freight, handling cost and wasted materials are recognized as current period charges.

Note 5. Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation of $224,994 and $220,444 as of March 31, 2017 and December 31, 2016, respectively.

Note 6. Fair Value Measurements

The Company has various financial instruments that must be measured at fair value on a recurring basis, including marketable debt and equity securities held by Astec Insurance Company ("Astec Insurance"), the Company's captive insurance company, and marketable equity securities held in an unqualified Supplemental Executive Retirement Plan ("SERP"). The obligations of the Company associated with the financial assets held in the SERP also constitute a liability of the Company for financial reporting purposes and are included in other long-term liabilities in the accompanying condensed consolidated balance sheets. The Company's subsidiaries also occasionally enter into foreign currency exchange contracts to mitigate exposure to fluctuations in currency exchange rates.

The carrying amount of cash and cash equivalents, trade receivables, other receivables, revolving debt, accounts payable and long-term debt approximates their fair value because of their short-term nature and/or interest rates associated with the instruments. Investments are carried at their fair value based on quoted market prices for identical or similar assets or, where no quoted prices exist, other observable inputs for the asset. The fair values of foreign currency exchange contracts are based on quotations from various banks for similar instruments using models with market based inputs.

Financial assets and liabilities are categorized based upon the level of judgment associated with the inputs used to measure their fair value. The inputs used to measure the fair value are identified in the following hierarchy:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 - Unadjusted quoted prices in active markets for similar assets or liabilities; or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active; or inputs other than quoted prices that are observable for the asset or liability.

Level 3 - Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

As indicated in the tables below (which excludes the Company's pension assets), the Company has determined that all of its financial assets and liabilities as of March 31, 2017 and December 31, 2016 are Level 1 and Level 2 in the fair value hierarchy as defined above:

	March 31, 2017		
	Level 1	Level 2	Total
Financial Assets:			
Trading equity securities:			
SERP money market fund	$ 374	$ --	$ 374
SERP mutual funds	3,508	--	3,508
Preferred stocks	488	--	488
Trading debt securities:			
Corporate bonds	5,601	--	5,601
Municipal bonds	--	2,290	2,290
Floating rate notes	121	--	121
Asset backed securities	--	611	611
US Treasury Notes	389	--	389
Other	--	1,760	1,760
Total financial assets	$ 10,481	$ 4,661	$ 15,142
Financial Liabilities:			
SERP liabilities	$ --	$ 7,675	$ 7,675
Derivative financial instruments	--	178	178
Total financial liabilities	$ --	$ 7,853	$ 7,853

	December 31, 2016		
	Level 1	Level 2	Total
Financial Assets:			
Trading equity securities:			
SERP money market fund	$ 92	$ --	$ 92
SERP mutual funds	3,335	--	3,335
Preferred stocks	475	--	475
Trading debt securities:			
Corporate bonds	5,413	--	5,413
Municipal bonds	--	2,248	2,248
Floating rate notes	118	--	118
U.S. Treasury bills	388	--	388
Asset backed securities	--	637	637
Other	--	2,283	2,283
Derivative financial instruments	--	144	144
Total financial assets	$ 9,821	$ 5,312	$ 15,133
Financial Liabilities:			
SERP liabilities	$ --	$ 7,882	$ 7,882
Derivative financial instruments	--	89	89
Total financial liabilities	$ --	$ 7,971	$ 7,971

The Company reevaluates the volume of trading activity for each of its investments at the end of each quarter and adjusts the level within the fair value hierarchy as needed. No investments changed hierarchy levels from December 31, 2016 to March 31, 2017.

The trading equity investments noted above are valued at their fair value based on their quoted market prices, and the debt securities are valued based upon a mix of observable market prices and model driven prices derived from a matrix of observable market prices for assets with similar characteristics obtained with the assistance of a nationally recognized third party pricing service. Additionally, a significant portion of the SERP's investments in trading equity securities are in money market and mutual funds. As these money market and mutual funds are held in a SERP, they are also included in the Company's liability under its SERP.

Trading debt securities are comprised of marketable debt securities held by Astec Insurance. Astec Insurance has an investment strategy that focuses on providing regular and predictable interest income from a diversified portfolio of high-quality fixed income securities.

Net unrealized gains or losses incurred on investments held as of March 31, 2017 and December 31, 2016 amounted to net losses of $47 and $107, respectively.

Note 7. Debt

On April 12, 2012, the Company and certain of its subsidiaries entered into an amended and restated credit agreement whereby Wells Fargo extended to the Company an unsecured line of credit of up to $100,000, including a sub-limit for letters of credit of up to $25,000. There were no borrowings outstanding under the agreement at any time during the three-month period ended March 31, 2017. Letters of credit totaling $8,496, including $6,200 of letters of credit issued to banks in Brazil to secure the local debt of Astec do Brasil Fabricacao de Equipamentos Ltda. ("Astec Brazil"), were outstanding under the credit facility as of March 31, 2017, resulting in additional borrowing ability of $91,504 under the credit facility. The credit agreement has a five-year term expiring in April 2017. Borrowings under the agreement are subject to an interest rate equal to the daily one-month LIBOR rate plus a 0.75% margin, resulting in a rate of 1.74% as of March 31, 2017. The unused facility fee is 0.175%. Interest only payments are due monthly.

On April 12, 2017, the credit agreement with Wells Fargo described above was amended and restated with several modifications including: a) the maturity date was extended to April 12, 2022; b) the sub-limit for letters of credit was increased from $25,000 to $30,000; and c) the unused facility fee was decreased from 0.175% to 0.125%. The amended and restated credit agreement contains certain financial covenants, including provisions concerning required levels of annual net income and minimum tangible net worth.

The Company's South African subsidiary, Osborn Engineered Products SA (Pty) Ltd ("Osborn"), has a credit facility of $7,049 with a South African bank to finance short-term working capital needs, as well as to cover performance letters of credit, advance payment and retention guarantees. As of March 31, 2017, Osborn had $697 of short-term borrowings and $761 in performance, advance payment and retention guarantees outstanding under the facility. The facility has been guaranteed by Astec Industries, Inc., but is otherwise unsecured. A 0.75% unused facility fee is charged if less than 50% of the facility is utilized. As of March 31, 2017, Osborn had available credit under the facility of $5,591. The interest rate is 0.25% less than the South Africa prime rate, resulting in a rate of 10.5% as of March 31, 2017.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling $5,235 from three Brazilian banks with interest rates ranging from 10.4% to 11.0%. The loans' maturity dates range from November 2018 to April 2024 and the debts are secured by Astec Brazil's manufacturing facility and also by letters of credit totaling $6,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various 5-year equipment financing loans outstanding with two Brazilian banks in the aggregate of $1,081 as of March 31, 2017 that have interest rates ranging from 3.5% to 16.3%. These equipment loans have maturity dates ranging from September 2018 to April 2020. Astec Brazil's loans are included in the accompanying condensed consolidated balance sheets as current maturities of long-term debt ($2,717) and long-term debt ($3,599) as of March 31, 2017.

Note 8. Product Warranty Reserves

The Company warrants its products against manufacturing defects and performance to specified standards. The warranty period and performance standards vary by market and uses of its products, but generally range from three months to two years or up to a specified number of hours of operation. The Company estimates the costs that may be incurred under its warranties and records a liability at the time product sales are recorded. The product warranty liability is primarily based on historical claim rates, nature of claims and the associated cost.

Changes in the Company's product warranty liability for the three-month periods ended March 31, 2017 and 2016 are as follows:

	Three Months Ended March 31,	
	2017	2016
Reserve balance, beginning of the period	$ 13,156	$ 9,100
Warranty liabilities accrued	3,996	3,615
Warranty liabilities settled	(3,460)	(2,357)
Other	27	39
Reserve balance, end of the period	$ 13,719	$ 10,397

Note 9. Accrued Loss Reserves

The Company records reserves for losses related to known workers' compensation and general liability claims that have been incurred but not yet paid or are estimated to have been incurred but not yet reported to the Company. The undiscounted reserves are actuarially determined based on the Company's evaluation of the type and severity of individual claims and historical information, primarily its own claims experience, along with assumptions about future events. Changes in assumptions, as well as changes in actual experience, could cause these estimates to change in the future. Total accrued loss reserves were $8,038 as of March 31, 2017 and $7,892 as of December 31, 2016, of which $5,318 and $5,040 were included in other long-term liabilities as of March 31, 2017 and December 31, 2016, respectively.

Note 10. Income Taxes

The Company's combined effective income tax rates were 34.1% and 37.4% for the three-month periods ended March 31, 2017 and 2016, respectively. The Company's effective tax rate for the three-month periods ended March 31, 2017 and 2016 includes the effect of state income taxes and other discrete items as well as a benefit for research and development credits.

The Company's recorded liability for uncertain tax positions as of March 31, 2017 has increased by approximately $91 as compared to December 31, 2016.

Note 11. Segment Information

The Company has three reportable segments, each of which is comprised of multiple business units that offer similar products and services and meet the requirements for aggregation. A brief description of each segment is as follows:

Infrastructure Group - This segment consists of five business units, three of which design, engineer, manufacture and market a complete line of portable, stationary and relocatable hot-mix asphalt plants, wood pellet plants, asphalt pavers, material transfer vehicles, stabilizers, milling machines, paver screeds and related ancillary equipment. The other two business units in this segment primarily operate as Company-owned dealers in the foreign countries in which they are domiciled. These two business units sell, service and install products produced by the manufacturing subsidiaries of the Company, and a majority of their sales are to customers in the infrastructure industry. The principal purchasers of the products produced by this group are asphalt producers, highway and heavy equipment contractors, wood pellet processors and foreign and domestic governmental agencies.

Aggregate and Mining Group - This segment consists of eight business units that design, engineer, manufacture and market a complete line of jaw crushers, cone crushers, horizontal shaft impactors, vertical shaft impactors, material handling, roll rock crushers and stationary rockbreaker systems, vibrating feeders and high frequency vibrating screens, conveyors, inclined, vertical and horizontal screens and sand classifying and washing equipment. The principal purchasers of products produced by this group are distributors, open mine operators, quarry operators, port and inland terminal operators, highway and heavy equipment contractors and foreign and domestic governmental agencies.

Energy Group - This segment consists of five business units that design, engineer, manufacture and market a complete line of drilling rigs for the oil and gas, geothermal and water well industries, high pressure diesel pump trailers for fracking and cleaning oil and gas wells, commercial and industrial burners, combustion control systems, a variety of industrial heaters to fit a broad range of applications including heating equipment for refineries, roofing material plants, chemical processing, rubber plants, oil sands and energy related processing, heat transfer processing equipment, thermal fluid storage tanks, waste heat recovery equipment, whole-tree pulpwood and biomass chippers and horizontal grinders. The principal purchasers of products produced by this group are oil, gas and water well drilling industry contractors, processors of oil, gas and biomass for energy production and contractors in the construction and demolition recycling markets. This group includes the operations of Power Flame Incorporated, which was acquired in August 2016.

Corporate - This category consists of business units that do not meet the requirements for separate disclosure as an operating segment or inclusion in one of the other reporting segments and includes the Company's parent company, Astec Industries, Inc., and Astec Insurance. The Company evaluates performance and allocates resources to its operating segments based on profit or loss from operations before U.S. federal income taxes and corporate overhead and thus these costs are included in the Corporate category.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Intersegment sales and transfers are valued at prices comparable to those for unrelated parties.

Segment Information:

	Three Months Ended March 31, 2017				
	Infrastructure Group	Aggregate and Mining Group	Energy Group	Corporate	Total
Net sales to external customers	$ 165,243	$ 100,613	$ 52,545	$ --	$ 318,401
Intersegment sales	4,025	3,436	5,591	--	13,052
Gross profit	37,801	25,023	12,887	60	75,771
Gross profit percent	22.9%	24.9%	24.5%	--	23.8%
Segment profit (loss)	$ 18,180	$ 8,428	$ 2,729	$ (14,428)	$ 14,909

	Three Months Ended March 31, 2016				
	Infrastructure Group	Aggregate and Mining Group	Energy Group	Corporate	Total
Net sales to external customers	$ 153,114	$ 92,488	$ 33,119	$ --	$ 278,721
Intersegment sales	3,173	4,851	3,466	--	11,490
Gross profit (loss)	39,837	25,148	7,082	(111)	71,956
Gross profit percent	26.0%	27.2%	21.4%	--	25.8%
Segment profit (loss)	$ 21,863	$ 9,538	$ (192)	$ (14,226)	$ 16,983

A reconciliation of total segment profits to the Company's consolidated totals is as follows:

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Total segment profits	$ 14,909	$ 16,983
Recapture of intersegment profit	171	695
Net income	15,080	17,678
Net loss attributable to non-controlling interest in subsidiaries	(40)	(65)
Net income attributable to controlling interest	$ 15,120	$ 17,743

Note 12. Contingent Matters

Certain customers have financed purchases of Company products through arrangements in which the Company is contingently liable for customer debt of $1,483 as of March 31, 2017. The maximum potential amount of future payments for which the Company would be liable was equal to $1,483 as of March 31, 2017. These arrangements also provide that the Company will receive the lender's full security interest in the equipment financed if the Company is required to fulfill its contingent liability under these arrangements. The Company has recorded a liability of $601 related to these guarantees as of March 31, 2017.

In addition, the Company is contingently liable under letters of credit issued by Wells Fargo totaling $8,496 as of March 31, 2017, including $6,200 of letters of credit that guarantee certain Astec Brazil bank debt. The outstanding letters of credit expire at various dates through October 2020. As of March 31, 2017, the Company's foreign subsidiaries are contingently liable for a total of $1,206 in performance letters of credit, advance payments and retention guarantees. The maximum potential amount of future payments under these letters of credit and guarantees for which the Company could be liable is $9,702 as of March 31, 2017.

The Company is currently a party to various claims and legal proceedings that have arisen in the ordinary course of business. If management believes that a loss arising from such claims and legal proceedings is probable and can reasonably be estimated, the Company records the amount of the loss (excluding estimated legal fees) or the minimum estimated liability when the loss is estimated using a range and no point within the range is more probable than another. As management becomes aware of additional information concerning such contingencies, any potential liability related to these matters is assessed and the estimates are revised, if necessary. If management believes that a loss arising from such claims and legal proceedings is either (i) probable but cannot be reasonably estimated or (ii) reasonably possible but not probable, the Company does not record the amount of the loss, but does make specific disclosure of such matter. Based upon currently available information and with the advice of counsel, management believes that the ultimate outcome of its current claims and legal proceedings, individually and in the aggregate, will not have a material adverse effect on the Company's financial position, cash flows or results of operations. However, claims and legal proceedings are subject to inherent uncertainties and rulings unfavorable to the Company could occur. If an unfavorable ruling were to occur, there exists the possibility of a material adverse effect on the Company's financial position, cash flows or results of operations.

During 2004, the Company received notice from the Environmental Protection Agency ("EPA") that it may be responsible for a portion of the costs incurred in connection with an environmental cleanup in Illinois. The discharge of hazardous materials and associated cleanup relate to activities occurring prior to the Company's acquisition of Barber-Greene in 1986. The Company believes that over 300 other parties have received similar notices. At this time, the Company cannot predict whether the EPA will seek to hold the Company liable for a portion of the cleanup costs or the amount of any such liability. The Company has not recorded a liability with respect to this matter because no estimate of the amount of any such liability can be made at this time.

Note 13. Shareholders' Equity

Under the Company's long-term incentive plans, key members of management may be issued restricted stock units ("RSUs") each year based upon the annual financial performance of the Company and its subsidiaries. The number of RSUs granted each year is determined based upon the performance of individual subsidiaries and consolidated annual financial performance. Generally, for RSUs granted through February 2016, each award will vest at the end of five years from the date of grant, or at the time a recipient retires after reaching age 65, if earlier. Awards granted in February 2017 and after will vest at the end of three years from the date of grant or at the time a recipient retires after reaching age 65, if earlier.

A total of 22 and 76 RSUs vested during the three-month periods ended March 31, 2017 and 2016, respectively. The Company withheld 8 and 24 shares due to statutory payroll tax withholding requirements upon the vesting of the RSUs in the first three months of 2017 and 2016, respectively, and used Company funds to remit the related required minimum withholding taxes to the various tax authorities. The vesting date fair value of the RSUs that vested during the first three months of 2017 and 2016 was $1,445 and $3,204, respectively. Compensation expense of $856 and $453 was recorded in the three-month periods ended March 31, 2017 and 2016, respectively, to reflect the fair value of RSUs granted (or anticipated to be granted for 2017 performance) to employees amortized over the portion of the vesting period occurring during the periods.

Note 14. Other Income, Net of Expenses

Other income, net of expenses for the three-month periods ended March 31, 2017 and 2016 is presented below:

	Three Months Ended March 31,	
	2017	2016
Interest income	$ 175	$ 288
Gain (loss) on investments	27	(36)
License fee income	250	195
Other	60	97
Total	$ 512	$ 544

Note 15. Derivative Financial Instruments

The Company is exposed to certain risks related to its ongoing business operations. The primary risk managed by using derivative instruments is foreign currency risk. From time to time the Company's foreign subsidiaries enter into foreign currency exchange contracts to mitigate exposure to fluctuations in currency exchange rates. The fair value of the derivative financial instrument is recorded on the Company's balance sheet and is adjusted to fair value at each measurement date. The changes in fair value are recognized in the consolidated statements of income in the current period. The Company does not engage in speculative transactions nor does it hold or issue financial instruments for trading purposes. The average U.S. dollar equivalent notional amount of outstanding foreign currency exchange contracts was $10,485 during the three-month period ended March 31, 2017. The Company reported $178 of derivative liabilities in other current liabilities at March 31, 2017. At December 31, 2016, the Company reported $144 of derivative assets in other current assets and $89 of derivative liabilities in other current liabilities. The Company recognized, as a component of cost of sales, losses of $350 and $661 on the change in fair value of derivative financial instruments in the three month periods ended March 31, 2017 and 2016, respectively. There were no derivatives that were designated as hedges at March 31, 2017.

Note 16. Business Combination

In August 2016, the Company acquired substantially all of the assets and certain liabilities of Power Flame Incorporated ("PFI") for a total purchase price of $39,765. The purchase price was paid in cash with $4,000 deposited into escrow for a period of time not to exceed two years pending final resolution of certain post-closing adjustments and any indemnification claims. The Company's allocation of the purchase price resulted in the recognition of $12,632 of goodwill and $17,990 of other intangible assets consisting of technology (19 year useful life), trade names (15 year useful life) and customer relationships (18 year useful life). The revenues and results of operations of PFI were not significant in relation to the Company's financial statements for the period ended December 31, 2016 and would not have been material on a proforma basis to any earlier period. PFI's operating results are included in the Energy Group beginning in the third quarter of 2016.

PFI, located in Parsons, Kansas, began operations in 1948 and manufactures and sells gas, oil and combination gas/oil and low NOx burners with outputs ranging from 400 thousand BTU's per hour to 120 million BTU's per hour as well as combustion control systems designed for commercial, industrial and process heating applications.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements contained anywhere in this Quarterly Report on Form 10-Q that are not limited to historical information are considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are sometimes identified by the words "will," "would," "should," "could," "may," "believes," "anticipates," "intends," "forecasts" and "expects" and similar expressions. Such forward-looking statements include, without limitation, statements regarding the Company's expected sales and results of operations during 2017, the Company's expected capital expenditures in 2017, the expected benefit and impact of financing arrangements, the ability of the Company to meet its working capital and capital expenditure requirements through March 31, 2018, the amount and impact of any current or future state or federal funding for transportation construction programs, the need for road improvements, the amount and impact of other public sector spending and funding mechanisms, changes in the economic environment as it affects the Company, the market confidence of customers and dealers, the Company being called upon to fulfill certain contingencies, the expected dates of granting of restricted stock units, changes in interest rates and the impact of such changes on the financial results of the Company, changes in the prices of steel and oil and the impact of such changes generally and on the demand for the Company's products, customer's buying decisions, the Company's business, the ability of the Company to offset future changes in prices in raw materials, the change in the strength of the dollar and the level of the Company's presence and sales in international markets, the impact that further development of domestic oil and natural gas production capabilities would have on the domestic economy and the Company's business, the seasonality of the Company's business, the Company's investments, the percentage of the Company's equipment sold directly to end users, the amount or value of unrecognized tax benefits, the impact of IRS tax regulations, payment of dividends by the Company, and the ultimate outcome of the Company's current claims and legal proceedings.

These forward-looking statements are based largely on management's expectations, which are subject to a number of known and unknown risks, uncertainties and other factors discussed in this Report and in other documents filed by the Company with the Securities and Exchange Commission, which may cause actual results, financial or otherwise, to be materially different from those anticipated, expressed or implied by the forward-looking statements. All forward-looking statements included in this document are based on information available to the Company on the date hereof, and the Company assumes no obligation to update any such forward-looking statements to reflect future events or circumstances.

The risks and uncertainties identified herein under the caption "Item 1A. Risk Factors" in Part II of this Report, elsewhere herein and in other documents filed by the Company with the Securities and Exchange Commission, including the Company's Annual Report on Form 10-K for the year ended December 31, 2016, should be carefully considered when evaluating the Company's business and future prospects.

Overview

The Company is a leading manufacturer and seller of equipment for the road building, aggregate processing, geothermal, water, oil and gas, and wood processing industries. The Company's businesses:

- design, engineer, manufacture and market equipment used in each phase of road building, including mining, quarrying and crushing the aggregate, mobile bulk and material handling solutions, producing asphalt or concrete, recycling old asphalt or concrete and applying the asphalt;

- design, engineer, manufacture and market additional equipment and components, including equipment for geothermal drilling, oil and natural gas drilling, industrial heat transfer, wood chipping and grinding, wood pellet processing, commercial and industrial burners, combustion control systems; and

- manufacture and sell replacement parts for equipment in each of its product lines.

The Company, as we refer to it herein, consists of a total of 20 companies that are consolidated in our financial statements, which includes 16 manufacturing companies, 2 companies that operate as dealers for the manufacturing companies, a captive insurance company and the parent company. The companies fall within three reportable operating segments: the Infrastructure Group, the Aggregate and Mining Group and the Energy Group.

Infrastructure Group- This segment consists of five business units, three of which design, engineer, manufacture and market a complete line of asphalt plants, asphalt pavers, wood pellet plants and related components and ancillary equipment. The two remaining companies in the Infrastructure Group primarily sell, service and install equipment produced by the manufacturing subsidiaries of the Company with the majority of sales to the infrastructure industry.

Aggregate and Mining Group- This segment consists of eight business units that design, manufacture and market heavy equipment and parts in the aggregate, metallic mining, quarrying, recycling, ports and bulk handling industries.

Energy Group- This segment consists of five business units that design, manufacture and market heaters, gas, oil and combination gas/oil burners, combustion control systems, drilling rigs, concrete plants, wood chippers and grinders, pump trailers, commercial and industrial burners, combustion control systems, storage equipment and related parts to the oil and gas, construction, and water well industries.

Individual Company subsidiaries included in the composition of the Company's segments are as follows:

1. **Infrastructure Group** – Astec, Inc., Roadtec, Inc., Carlson Paving Products, Inc., Astec Australia, Pty Ltd and Astec Mobile Machinery GmbH.

2. **Aggregate and Mining Group** – Telsmith, Inc., Kolberg-Pioneer, Inc., Johnson Crushers International, Inc., Osborn Engineered Products SA (Pty) Ltd, Breaker Technology, Inc., Astec Mobile Screens, Inc., Astec do Brasil Fabricacao de Equipamentos LTDA and Telestack Limited.

3. **Energy Group** – Heatec, Inc., CEI, Inc., GEFCO, Inc., Peterson Pacific Corp. and Power Flame Incorporated (beginning in August 2016).

The Company also has one other category, Corporate, that contains the business units that do not meet the requirements for separate disclosure as a separate operating segment or inclusion in one of the other reporting segments. The business units in the Corporate category are Astec Insurance Company ("Astec Insurance" or "the captive") and Astec Industries, Inc., the parent company. These two companies provide support and corporate oversight for all the companies that fall within the reportable operating segments.

The Company's financial performance is affected by a number of factors, including the cyclical nature and varying conditions of the markets it serves. Demand in these markets fluctuates in response to overall economic conditions and is particularly sensitive to the amount of public sector spending on infrastructure development, privately funded infrastructure development, changes in the price of crude oil, which affects the cost of fuel and liquid asphalt, and changes in the price of steel.

The Company believes that federal highway funding influences the purchasing decisions of the Company's customers, who are typically more comfortable making capital equipment purchases with long-term federal legislation in place. Federal funding provides for approximately 25% of all highway, street, roadway and parking construction in the United States.

In July 2012, the "Moving Ahead for Progress in the 21st Century Act" ("Map-21") was approved by the U.S. federal government, which authorized $105 billion of federal spending on highway and public transportation programs through fiscal year 2014. In August 2014, the U.S. government approved short-term funding of $10.8 billion through May 2015. Federal transportation funding operated on short-term appropriations until December 4, 2015 when the Fixing America's Surface Transportation Act ("FAST Act") was signed into law. The $305 billion FAST Act approved funding for highways of approximately $205 billion and transit projects of approximately $48 billion for the five-year period ending September 30, 2020. The Company believes a multi-year highway program (such as the FAST Act) will have the greatest positive impact on the road construction industry and allow its customers to plan and execute longer-term projects, but given the inherent uncertainty in the political process, the level of governmental funding for federal highway projects will similarly continue to be uncertain. In late 2016, the newly-elected administration stated one of its priorities would be a new infrastructure bill including increased funding for roads, bridges, tunnels, airports, railroads, ports and waterways, pipelines, clean water infrastructure, energy infrastructure and telecommunication needs. The funding for the bill as proposed would rely in part on direct federal spending as well as increased private sector funding in exchange for federal tax credits. Governmental funding that is committed or earmarked for federal highway projects is always subject to repeal or reduction. Although continued funding under the FAST Act or funding of a bill passed by the new administration is expected, it may be at lower levels than originally approved or anticipated.

In addition, Congress could pass legislation in future sessions that would allow for the diversion of previously appropriated highway funds for other purposes, or it could restrict funding of infrastructure projects unless states comply with certain federal policies. The level of future federal highway construction is uncertain and any future funding may be at levels lower than those currently approved or that have been approved in the past.

The public sector spending described above is needed to fund road, bridge and mass transit improvements. The Company believes that increased funding is unquestionably needed to restore the nation's highways to a quality level required for safety, fuel efficiency and mitigation of congestion. In the Company's opinion, amounts needed for such improvements are significantly greater than amounts approved to date, and funding mechanisms such as the federal usage fee per gallon of gasoline, which is still at the 1993 level of 18.4 cents per gallon, would likely need to be increased along with other measures to generate the funds needed.

In addition to public sector funding, the economies in the markets the Company serves, the price of oil and its impact on customers' purchasing decisions and the price of steel may each affect the Company's financial performance. Economic downturns generally result in decreased purchasing by the Company's customers, which, in turn, causes reductions in sales and increased pricing pressure on the Company's products. Rising interest rates also typically negatively impact customers' attitudes toward purchasing equipment. The Federal Reserve has maintained historically low interest rates in response to the economic downturn which began in 2009; however, the Federal Reserve raised the Federal Funds Rate in 2016 and again in early 2017, and may implement additional increases in the future.

Significant portions of the Company's revenues from the Infrastructure Group relate to the sale of equipment involved in the production, handling, recycling or installation of asphalt mix. Liquid asphalt is a by-product of oil production. An increase or decrease in the price of oil impacts the cost of asphalt, which is likely to alter demand for asphalt and therefore affect demand for certain Company products. While increasing oil prices may have a negative financial impact on many of the Company's customers, the Company's equipment can use a significant amount of recycled asphalt pavement, thereby partially mitigating the effect of increased oil prices on the final cost of asphalt for the customer. The Company continues to develop products and initiatives to reduce the amount of oil and related products required to produce asphalt mix. Oil price volatility makes it difficult to predict the costs of oil-based products used in road construction such as liquid asphalt and gasoline. Oil prices rose during much of 2016 but have stabilized during the first quarter of 2017. Minor fluctuations in oil prices should not have a significant impact on customers' buying decisions. Other factors such as political uncertainty in oil producing countries, interruptions in oil production due to disasters, whether natural or man-made, or other economic factors could significantly impact oil prices, which could negatively impact demand for the Company's products. However, the Company believes the continued funding of the FAST Act federal highway bill passed in December 2015 has greater potential to impact the buying decisions of the Company's customers than does the fluctuation of oil prices in 2017.

Contrary to the impact of oil prices on many of the Company's Infrastructure Group products as discussed above, the products manufactured by the Energy Group, which are used in drilling for oil and natural gas, in heaters for refineries and oil sands, and in double fluid pump trailers for fracking and oil and gas extraction, would benefit from higher oil and natural gas prices, to the extent that such higher prices lead to increased development in the oil and natural gas production industries. The Company believes further development of domestic oil and natural gas production capabilities is needed and would positively impact the domestic economy and the Company's business.

Steel is a major component in the Company's equipment. Steel prices increased during the first quarter of 2017, and the Company expects this trend to continue through the second quarter of 2017. The Company continues to utilize forward-looking contracts (with no minimum or specified quantity guarantees) coupled with advanced steel purchases to minimize the impact of any price increases. The Company will review the trends in steel prices entering into the second half of 2017 and establish future contract pricing accordingly.

In addition to the factors stated above, many of the Company's markets are highly competitive, and its products compete worldwide with a number of other manufacturers and dealers that produce and sell similar products. From 2010 through mid-2012, a weak U.S. dollar, combined with improving economic conditions in certain foreign economies, had a positive impact on the Company's international sales. The strengthening of the U.S. dollar from mid-2012 through March 31, 2017 has negatively impacted pricing in certain foreign markets the Company serves. The Company expects the U.S. dollar to remain strong in the near term relative to most foreign currencies. Increasing domestic interest rates or weakening economic conditions abroad could cause the U.S. dollar to continue to strengthen, which could negatively impact the Company's international sales.

In the United States and internationally, the Company's equipment is marketed directly to customers as well as through dealers. During 2016, approximately 75% to 80% of equipment sold by the Company was sold directly to the end user. The Company expects this ratio to remain relatively consistent through the end of 2017.

The Company is operated on a decentralized basis with a complete management team for each operating subsidiary. Finance, insurance, legal, shareholder relations, corporate accounting and other corporate matters are primarily handled at the corporate level (i.e., Astec Industries, Inc., the parent company). The engineering, design, sales, manufacturing and basic accounting functions are handled at each individual subsidiary. Standard accounting procedures are prescribed and followed in all reporting.

During 2016, the Company implemented revised profit sharing plans whereby corporate officers, subsidiary presidents and other employees at each subsidiary have the opportunity to earn profit sharing incentives based upon the Company's and/or the individual groups or subsidiaries' return on capital employed, EBITDA margin and safety. Corporate officers' and subsidiary presidents' awards when calculated at targeted performance are between 35% and 100% of their base salary, depending upon their responsibilities, and the plans allow for awards of up to 200% of the target. Each subsidiary has the opportunity to earn up to 10% of its after-tax profit as a profit sharing incentive award to be paid to its employees.

The Company also implemented revised long-term incentive plans during 2016 whereby corporate officers, subsidiary presidents and other corporate or subsidiary management employees will be awarded Restricted Stock Units ("RSUs") if certain goals are met based upon the Company's Total Shareholder's Return ("TSR") as compared to a peer group and the Company's pretax profit margin. The grant date value of corporate officers' and subsidiary presidents' awards when calculated at targeted performance are between 20% and 100% of their base salary, depending upon their responsibilities, and the plans allow for awards of up to 200% of the target. Additional RSUs may be granted to other key subsidiary management employees based upon individual subsidiary pretax profit margins and Company TSR as compared to a peer group.

Results of Operations

Net Sales

Net sales for the first quarter of 2017 were $318,401 compared to $278,721 for the first quarter of 2016, an increase of $39,680 or 14.2%. Sales are generated primarily from new equipment and parts sales to domestic and international customers. Sales increased in all of the Company's segments. Domestic sales in the Infrastructure Group and Aggregate and Mining Group, and to a lesser extent in the Energy Group, continue to be positively impacted by effects of the long-term federal highway bill enacted in December 2015. International sales are showing improvement due to improved infrastructure activity, the stabilization of the U.S. dollar in certain foreign markets and a slight recovery in the mining and oil and gas sectors. Sales reported by the Company's foreign subsidiaries in U.S. dollars for the first quarter of 2017 would have been $622 lower had 2017 foreign exchange rates been the same as first quarter 2016 rates.

Domestic sales for the first quarter of 2017 were $253,497 or 79.6% of consolidated net sales compared to $234,247 or 84.0% of consolidated net sales for the first quarter of 2016, an increase of $19,250 or 8.2%. Domestic sales for the first quarter of 2017 as compared to the first quarter of 2016 increased $12,140 in the Energy Group (including $5,982 of Power Flame sales), $4,318 in the Aggregate and Mining Group and $2,792 in the Infrastructure Group.

International sales for the first quarter of 2017 were $64,904 or 20.4% of consolidated net sales compared to $44,474 or 16.0% of consolidated net sales for the first quarter of 2016, an increase of $20,430 or 45.9%. International sales for the first quarter of 2017 as compared to the first quarter of 2016 increased $9,337 in the Infrastructure Group, $7,286 in the Energy Group and $3,807 in the Aggregate and Mining Group. The increases in international sales occurred primarily in Canada, Russia, Australia, Mexico and Africa, offset by decreases in sales in South America and Japan/Korea. These increased sales were achieved in spite of the continuing strength of the U.S. dollar as compared to the currencies in many of the countries in which the Company operates, low oil and gas pricing, and the continuing sluggishness in the mining sector. The increased sales volumes may indicate a softening of the impact of these issues on the Company's sales; however, the issues continue to be a significant headwind to our regaining historical levels of international sales.

Parts sales for the first quarter of 2017 were $80,959 compared to $74,053 for the first quarter of 2016, an increase of $6,906 or 9.3%. Parts sales as a percentage of net sales decreased 120 basis points from 26.6% for the first quarter of 2016 to 25.4% for the first quarter of 2017. Parts sales increased in all of the Company's segments.

Gross Profit

Consolidated gross profit increased $3,815 or 5.3% to $75,771 for the first quarter of 2017 compared to $71,956 for the first quarter of 2016. Gross profit as a percentage of sales decreased 200 basis points to 23.8% for the first quarter of 2017 compared to 25.8% for the first quarter of 2016 due to changes in product mix, increased costs associated with new products, a $489 increase in obsolescence expense, a $383 increase in warranty expense, a $378 reduction in foreign exchange gains and a $524 reduction in the recapture of intercompany profits previously deferred.

Selling, General, Administrative and Engineering Expenses

Selling, general, administrative and engineering expenses increased $9,315 to $53,121 or 16.7% of net sales for the first quarter of 2017, compared to $43,806 or 15.7% of net sales for the first quarter of 2016 due to increases in selling expenses of $4,298 (including increases in exhibit costs for ConExpo-2017 of $4,254 and commissions of $1,016), general and administrative expenses of $3,721 (including increases in wages of $629, annual incentive earnings of $1,015 and restricted stock unit expense of $403) and engineering expenses of $1,296 (including an increase of $592 in research and development costs).

Interest Expense

Interest expense for the first quarter of 2017 decreased to $265 from $467 for the first quarter of 2016 due to reduced interest on tax return audits and a reduction in bank debt at Astec Brazil.

Other Income, Net of Expenses

Other income, net of expenses was $512 for the first quarter of 2017 compared to $544 for the first quarter of 2016, a decrease of $32.

Income Tax Expense
The Company's combined effective income tax rate was 34.1% for the first quarter of 2017 compared to 37.4% for the first quarter of 2016. The tax rate decline between periods is due to favorable impacts of state jobs tax credits, federal domestic production activities deductions and research and development tax credits and a reduction in foreign subsidiaries losses for which tax benefits are not recognized.

Net Income
The Company had net income attributable to controlling interest of $15,120 for the first quarter of 2017 compared to $17,743 for the first quarter of 2016, a decrease of $2,623 or 14.8%. Net income attributable to controlling interest per diluted share was $0.65 for the first quarter of 2017 compared to $0.77 for the first quarter of 2016, a decrease of $0.12. Diluted shares outstanding for the quarters ended March 31, 2017 and 2016 were 23,176 and 23,135, respectively.

Dividends
In February 2013, the Company's Board of Directors approved a dividend policy pursuant to which the Company began paying a quarterly $0.10 per share dividend on its common stock beginning in the second quarter of 2013. The actual amount of future quarterly dividends, if any, will be based upon the Company's financial position, results of operations, cash flows, capital requirements and restrictions under the Company's existing credit agreement, among other factors. The Board retained the power to modify, suspend or cancel the Company's dividend policy in any manner and at any time it deems necessary or appropriate in the future. The Company paid quarterly dividends of $0.10 per common share to shareholders in each quarter of 2016 and the first quarter of 2017.

Backlog
The backlog of orders as of March 31, 2017 was $361,767 compared to $438,690 as of March 31, 2016, a decrease of $76,923 or 17.5%. Domestic backlogs decreased $97,510 or 25.1% while international backlogs increased $20,587 or 40.6%. The March 31, 2017 backlog was comprised of 80.3% domestic orders and 19.7% international orders, as compared to 88.4% domestic orders and 11.6% international orders as of March 31, 2016. Included in the March 31, 2017 and 2016 backlogs is approximately $60,000 for a three line pellet plant from one customer under a Company financed arrangement whereby the Company will record the related revenues when payment is received, which is expected in 2018. A majority of the backlog at March 31, 2016 pertaining to a $122,500 pellet plant order from a second customer was fulfilled in 2016 and the first quarter of 2017, with a remaining backlog of $8,251 related to this order at March 31, 2017. No additional pellet plant orders have been received. All March 31, 2016 backlog amounts have been recast to include the backlog of Power Flame Incorporated which was acquired on August 1, 2016. The Company is unable to determine whether the changes in backlogs were experienced by the industry as a whole; however, the Company believes the changes in backlogs reflect the current economic conditions the industry is experiencing.

Segment Net Sales:

	Three Months Ended March 31,			
	2017	2016	$ Change	% Change
Infrastructure Group	$ 165,243	$ 153,114	$ 12,129	7.9%
Aggregate and Mining Group	100,613	92,488	8,125	8.8%
Energy Group	52,545	33,119	19,426	58.7%

Infrastructure Group: Sales in this group were $165,243 for the first quarter of 2017 compared to $153,114 for the same period in 2016, an increase of $12,129 or 7.9%. Domestic sales for the Infrastructure Group increased $2,792 or 2.0% for the first quarter of 2017 compared to the same period in 2016 due primarily to increases in mobile equipment related sales of $10,249 and asphalt plant related sales of $8,123, offset by a decline in pellet plant sales of $15,604. The increases in domestic sales are due primarily to increased road building activities impacted by the long-term highway bill approved in December 2015. International sales for the Infrastructure Group increased $9,337 or 56.2% for the first quarter of 2017 compared to the same period in 2016 due primarily to a $7,459 increase in mobile asphalt related sales resulting from improved highway building activities in certain foreign countries. The increase in international sales was also impacted by the Company's decision to market its mobile equipment products through equipment dealers in select territories in which historical direct sales efforts yielded less than desired volumes. Additionally, sales through the Company-owned distributor in Australia increased by 30.5% from the first quarter of 2016 to the first quarter of 2017. Sales increases in Canada, Russia, Mexico and Australia were partially offset by decreases in sales in Europe, South America and China. Parts sales for the Infrastructure Group increased 6.8% for the first quarter of 2017 compared to the same period in 2016 due primarily to improved sales of parts for mobile asphalt equipment.

Aggregate and Mining Group: Sales in this group were $100,613 for the first quarter of 2017 compared to $92,488 for the same period in 2016, an increase of $8,125 or 8.8%. Domestic sales for the Aggregate and Mining Group increased by $4,318 or 6.4% for the first quarter of 2017 compared to the same period in 2016 due primarily to improved sales by the Company's Northern Ireland based subsidiary into the U.S. domestic market and increased sales to the Company's traditional rock quarry markets. International sales for the Aggregate and Mining Group increased $3,807 or 15.4% in the first quarter of 2017 compared to the same period in 2016 due to a slight moderation of foreign exchange increases versus the U.S. dollar in certain foreign jurisdictions as well as a small improvement in sales in the mining industry compared to the historically low sales in 2016. International sales increases in Canada and Europe were partially offset by decreased sales in Japan/Korea and South America (excluding Brazil). Parts sales for this group increased 9.4% for the first quarter of 2017 compared to the same period in 2016.

Energy Group: Sales in this group were $52,545 for the first quarter of 2017 compared to $33,119 for the same period in 2016, an increase of $19,426 or 58.7%. Domestic sales for the Energy Group increased $12,140 or 40.4% for the first quarter of 2017 compared to the same period in 2016 due primarily to $5,982 of sales by Power Flame, which was acquired in August 2016, as well as a $2,957 increase in sales (related to both water and oil and gas markets) between periods by the Company's GEFCO subsidiary. International sales for the Energy Group increased $7,286 or 237.4% due primarily to increased sales of $2,831 by Peterson Pacific and $2,263 by GEFCO (including a $1,397 deep water well rig sold to a customer in Africa). Sales increases occurred in most foreign territories but increased most significantly in Australia, Africa and Canada. Parts sales for this group increased 20.7% for the first quarter of 2017 compared to the same period in 2016.

Segment Profit (Loss):

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016	$ Change	% Change
Infrastructure Group	$ 18,180	$ 21,863	$ (3,683)	(16.8)%
Aggregate and Mining Group	8,428	9,538	(1,110)	(11.6)%
Energy Group	2,729	(192)	2,921	N/A
Corporate	(14,428)	(14,226)	(202)	(1.4)%

Infrastructure Group: Segment profit for this group was $18,180 for the first quarter of 2017 compared to $21,863 for the same period in 2016, a decrease of $3,683 or 16.8%. Segment profits for the Infrastructure Group were negatively impacted by a decrease in gross profit of $2,036 resulting from a 310 basis point decrease in gross margins (primarily due to product mix changes due to decreased pellet plant sales) and an $1,667 increase in selling expenses (primarily related to our exhibit expenses at ConExpo 2017).

Aggregate and Mining Group: Segment profit for this group was $8,428 for the first quarter of 2017 compared to $9,538 for the same period in 2016, a decrease of $1,110 or 11.6%. The decrease in profit primarily resulted from $1,746 of ConExpo 2017 related costs incurred in the first quarter of 2017, partially offset by a $440 reduction in sales promotions while gross profits remained relatively constant (a small decline of $125).

Energy Group: The Energy group had a profit of $2,729 for the first quarter of 2017 compared to a loss of $192 for the first quarter of 2016, a favorable change of $2,921. Profit for the segment was positively impacted by a $5,805 increase in gross profits due to a 310 basis point increase in gross margins on $19,426 of increased sales between periods, partially impacted by a $2,482 improvement in gross profits at the Company's GEFCO subsidiary and gross profits earned by Power Flame, which was acquired in August 2016. The improved gross profits were partially offset by an increase in selling expenses between periods of $2,064, including a $723 increases in wages and commissions and $485 related to ConExpo-2017.

Corporate: The Corporate Group had a loss of $14,428 for the first quarter of 2017 compared to a loss of $14,226 for the first quarter of 2016, an unfavorable increase of $202 or 1.4%. Corporate losses were favorably impacted by a $2,527 reduction in income taxes offset by increases in annual incentive plan expense of $1,034 and restricted stock unit expense of $403.

Liquidity and Capital Resources

The Company's primary sources of liquidity and capital resources are its cash on hand, borrowing capacity under a $100,000 revolving credit facility and cash flows from operations. The Company had $55,401 of cash available for operating purposes as of March 31, 2017, of which $16,999 was held by the Company's foreign subsidiaries. While the Company has no plans to transfer the cash held by its foreign subsidiaries to the U.S. in the foreseeable future, to the extent foreign earnings are eventually repatriated, such amounts may be subject to income tax liabilities, both in the U.S. and in various applicable foreign jurisdictions. At March 31, 2017 and at all times during the first quarter of 2017, the Company had no borrowings outstanding under its credit facilities with Wells Fargo Bank, N.A. Net of letters of credit totaling $8,496, the Company had borrowing availability of $91,504 under the credit facility as of March 31, 2017.

On April 12, 2017, the Company's credit agreement with Wells Fargo was amended and restated with several modifications including: a) the maturity date was extended to April 12, 2022; b) the sub-limit for letters of credit was increased from $25,000 to $30,000; and c) the unused facility fee was decreased from 0.175% to 0.125%. The amended and restated credit agreement contains certain financial covenants, including provisions concerning required levels of annual net income and minimum tangible net worth. The Company was in compliance with the financial covenants of the Wells Fargo agreement at March 31, 2017.

The Company's South African subsidiary, Osborn Engineered Products SA (Pty) Ltd ("Osborn"), has a credit facility of $7,049 with a South African bank to finance short-term working capital needs, as well as to cover performance letters of credit, advance payment and retention guarantees. As of March 31, 2017, Osborn had $697 of short-term borrowings and $761 in performance, advance payment and retention guarantees outstanding under the facility. The facility has been guaranteed by Astec Industries, Inc., but is otherwise unsecured. A 0.75% unused facility fee is charged if less than 50% of the facility is utilized. As of March 31, 2017, Osborn had available credit under the facility of $5,591. The interest rate is 0.25% less than the South Africa prime rate, resulting in a rate of 10.5% as of March 31, 2017.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling $5,235 from three Brazilian banks with interest rates ranging from 10.4% to 11.0%. The loans' maturity dates range from November 2018 to April 2024 and the debts are secured by Astec Brazil's manufacturing facility and also by letters of credit totaling $6,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various 5-year equipment financing loans outstanding with two Brazilian banks in the aggregate of $1,081 as of March 31, 2017 that have interest rates ranging from 3.5% to 16.3%. These equipment loans have maturity dates ranging from September 2018 to April 2020.

Cash Flows from Operating Activities:

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016	Increase (Decrease)
Net income	$ 15,080	$ 17,678	$ (2,598)
Depreciation and amortization	6,411	5,870	541
Provision for warranties	3,996	3,615	381
Changes in working capital:			
Increase in trade and other receivables	(45,910)	(17,667)	(28,243)
Increase in inventories	(12,166)	(4,728)	(7,438)
Increase in accounts payable	16,276	8,193	8,083
Increase (decrease) in customer deposits	(154)	22,138	(22,292)
Decrease in accrued product warranties	(3,460)	(2,357)	(1,103)
Change in prepaid and income taxes payable, net	7,877	9,745	(1,868)
Other, net	(2,672)	2,576	(5,248)
Net cash provided (used) by operating activities	$ (14,722)	$ 45,063	$ (59,785)

Net cash from operating activities decreased by $59,785 for the first three months of 2017 as compared to the first three months of 2016 due primarily to a $28,243 increase in the growth of accounts receivables (due to an increase in days outstanding from 38.7 to 43.3 between periods), an increase in the growth of inventories of $7,438 related to increased sales volumes, a reduction in the growth of customer deposits of $22,292 (due primarily to a large pellet plant related deposit received in the first quarter of 2016) offset by a $8,083 increase in the growth of accounts payable.

Cash Flows Used by Investing Activities:

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016	Increase (Decrease)
Expenditures for property and equipment	$ (5,406)	$ (5,054)	$ (352)
Other	(152)	99	(251)
Net cash used by investing activities	$ (5,558)	$ (4,955)	$ (603)

Net cash used by investing activities increased by $603 for the first three months of 2017 as compared to the same period in 2016 due primarily to increased spending on capital expenditures in the first quarter of 2017 as compared to the first quarter of 2016.

Total capital expenditures for 2017 are forecasted to be approximately $30,000. The Company expects to finance these expenditures using currently available cash balances, internally generated funds and available credit under the Company's credit facilities. Capital expenditures are generally for machinery, equipment and facilities used by the Company in the production of its various products. The Company believes that its current working capital, cash flows generated from future operations and available capacity under its credit facility will be sufficient to meet the Company's working capital and capital expenditure requirements through March 31, 2018.

Cash Flows from Financing Activities:

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016	Increase (Decrease)
Payment of dividends	$ (2,306)	$ (2,304)	$ (2)
Net change in borrowings from banks	(4,601)	274	(4,875)
Sale (purchase) of Company shares held by SERP, net	285	(20)	305
Other, net	(501)	(1,022)	521
Net cash used by financing activities	$ (7,123)	$ (3,072)	$ (4,051)

Cash from financing activities decreased by $4,051 for the first three months of 2017 compared to the same period in 2016 due primarily to $6,216 of an overdraft facility outstanding at the Company's South African subsidiary at December 31, 2016 being paid in the first quarter of 2017.

Financial Condition
The Company's current assets increased to $606,332 as of March 31, 2017 from $576,833 as of December 31, 2016, an increase of $29,499 or 5.1% due primarily to an increases in trade receivables of $44,879 and inventories of $12,166, offset by a decline in cash of $26,970 during the first quarter of 2017.

The Company's current liabilities increased to $184,635 as of March 31, 2017 from $168,861 as of December 31, 2016, an increase of $15,774 or 9.3% due primarily to an increase in accounts payable of $16,509.

Market Risk and Risk Management Policies
We have no material changes to the disclosure on this matter made in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Off-balance Sheet Arrangements
As of March 31, 2017, the Company does not have any off-balance sheet arrangements as defined by Item 303(a)(4) of Regulation S-K.

Contractual Obligations
During the three months ended March 31, 2017, there were no substantial changes in the Company's commitments or contractual liabilities.

Item 3. Quantitative and Qualitative Disclosures about Market Risk
The Company has no material changes to the disclosure on this matter made in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Item 4. Controls and Procedures

Disclosure Controls and Procedures
The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

The Company's management, under the supervision and with the participation of the Company's principal executive officer and principal financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Company's principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) were effective.

Internal Control over Financial Reporting
There have been no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended March 31, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

The Company is involved from time to time in legal actions arising in the ordinary course of its business. Other than as set forth in Part I, "Item 3. Legal Proceedings" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, the Company currently has no pending or threatened litigation that the Company believes will result in an outcome that would materially affect the Company's business, financial position, cash flows or results of operations. Nevertheless, there can be no assurance that future litigation to which the Company becomes a party will not have a material adverse effect on its business, financial position, cash flows or results of operations.

Item 1A. Risk Factors

In addition to the other information set forth in this Report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, which could materially affect the Company's business, financial condition or future results. There have been no material changes in the Company's risk factors from those disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The risks described in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 and in this Quarterly Report on Form 10-Q are not the only risks facing our Company. Additional risks and uncertainties not currently known to management or that management currently deems to be immaterial also may materially adversely affect the Company's business, financial condition or operating results.

Item 6. Exhibits

Exhibit No.	Description
10.1	Amendment to "Appendix A" of the Astec Industries, Inc. Supplemental Executive Retirement Plan, effective April 27, 2017.
10.2	First Amendment to Amended and Restated Credit Agreement dated April 12, 2017, between Astec Industries, Inc. and Certain of its Subsidiaries and Wells Fargo Bank, Nation Association.
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

The exhibits are numbered in accordance with Item 601 of Regulation S-K. Inapplicable exhibits are not included in the list.

* In accordance with Release No. 34-47551, this exhibit is hereby furnished to the SEC as an accompanying document and is not to be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended.

Items 2, 3, 4 and 5 are not applicable and have been omitted.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ASTEC INDUSTRIES, INC.
(Registrant)

Date: May 8, 2017

/s/ Benjamin G. Brock
Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)

Date: May 8, 2017

/s/ David C. Silvious
David C. Silvious
Chief Financial Officer, Vice President, and Treasurer
(Principal Financial and Accounting Officer)

Exhibit Index

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Exhibit 10.1

AMENDMENT TO "APPENDIX A" OF THE
ASTEC INDUSTRIES, INC.
SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN

THIS AMENDMENT to "Appendix A" of the Astec Industries, Inc. Supplemental Executive Retirement Plan, as amended and restated as of January 1, 2008 (the "Plan"), is adopted by Astec Industries, Inc. (the "Company"), effective as of April 27, 2017.

WHEREAS, Article 2 of the Plan permits the Board of Directors of the Company (the "Board") to designate participants in the Plan from time to time, whose names and effective dates of participation shall be set forth on Exhibit A to the Plan;

NOW, THEREFORE, the Company hereby amends "Appendix A" of the Plan in the form attached hereto, to update the same for changes in Plan participation approved by the Board, by action taken on April 27, 2017.

Except as amended herein, the Plan shall continue in full force and effect.

ASTEC INDUSTRIES, INC.

Date: April 27, 2017

By: /s/ Stephen C. Anderson
Name: Stephen C. Anderson
Title: Corporate Secretary

"APPENDIX A"
Each Participant's Date of Participation

Name of Participant	Effective Dates of Participation
W. Norman Smith	January 1, 1995
Richard Patek	January 1, 1995
Tim Gonigam	August 1, 2000
Jeff Elliott	January 1, 2002
Stephen C. Anderson	January 1, 2003
Richard Dorris	January 3, 2005
David C. Silvious	July 1, 2005
Ben Brock	January 1, 2007
Michael A. Bremmer	January 1, 2007
Lawrence R. Cumming	January 1, 2008
Neil Peterson	January 1, 2008
Joe Cline	February 1, 2008
Chris Colwell	May 31, 2011
Robin Leffew	August 1, 2011
Matthew B. Haven	January 1, 2013
Jeff May	October 1, 2013
Malcolm Swanson	January 1, 2014
Tom Wilkey	January 1, 2014
Jeff Schwarz	July 1, 2014
Steven L. Claude	August 24, 2015
John Irvine	April 28, 2016
Jaco Van Der Merwe	October 1, 2016
Scott Barker	April 3, 2017

Exhibit 10.2

FIRST AMENDMENT TO
AMENDED AND RESTATED CREDIT AGREEMENT

THIS FIRST AMENDMENT TO AMENDED AND RESTATED CREDIT AGREEMENT (this "Amendment"), dated this 12th day of April, 2017, is made and entered into on the terms and conditions hereinafter set forth, by and among ASTEC INDUSTRIES, INC., a Tennessee corporation (the "Borrower"), ASTEC, INC., a Tennessee corporation ("AI"), ASTEC MOBILE SCREENS, INC., a Nevada corporation ("AMS"), BREAKER TECHNOLOGY, INC., a Tennessee corporation ("BTI"), CEI ENTERPRISES, INC., a Tennessee corporation ("CEI"), CARLSON PAVING PRODUCTS, INC., a Washington corporation ("CPP"), GEFCO, INC., a Tennessee corporation ("GI"), HEATEC, INC., a Tennessee corporation ("HI"), JOHNSON CRUSHERS INTERNATIONAL, INC., a Tennessee corporation ("JCI"), KOLBERG-PIONEER, INC., a Tennessee corporation ("KPI"), PETERSON PACIFIC CORP., an Oregon corporation ("PPC"), POWER FLAME INCORPORATED, a Tennessee corporation ("PFI"), ROADTEC, INC., a Tennessee corporation ("RI"), TELSMITH, INC., a Delaware corporation ("TI"; together with AI, AMS, BTI, CEI, CPP, GI, HI, JCI, KPI, PPC, PFI, and RI, each a "Guarantor" and individually and collectively, the "Guarantors"), and WELLS FARGO BANK, NATIONAL ASSOCIATION, a national banking association (the "Bank").

W I T N E S S E T H:

WHEREAS, the Borrower, the Guarantors and the Bank are party to that certain Amended and Restated Credit Agreement dated as of April 12, 2012 (as heretofore and hereafter may have been further amended, restated or otherwise modified from time to time, the "Credit Agreement"; capitalized terms used and not otherwise defined herein shall have the meanings assigned thereto in the Credit Agreement), pursuant to which the Bank has previously made available to the Borrower a line of credit loan of up to One Hundred Million and 00/100 Dollars ($100,000,000.00), including a sub-limit for letters of credit of up to Twenty-Five Million and 00/100 Dollars ($25,000,000.00); and

WHEREAS, in connection with this Amendment, the Guarantors, including PFI will execute and deliver a Second Amended and Restated Guaranty;

WHEREAS, the Borrower, the Guarantors and the Bank desire to amend the Credit Agreement in certain respects as hereinafter set forth;

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower, the Guarantors and the Bank hereby agree as follows:

1. Amendment to Loan Agreement and Loan Documents. The Borrower Parties hereby represent and warrant that as of the date hereof, American Augers, Inc., a Delaware corporation ("AAI"), AI Development Group, Inc., a South Dakota corporation ("AID"), AI Enterprises, Inc., a South Dakota corporation ("AIE"), Astec Underground, Inc., a Tennessee corporation ("AUI"), and RI Properties, Inc., a South Dakota corporation ("RIP") either have no assets and no operations or have been merged with and into the Borrower or a Guarantor. The Credit Agreement and each of the Loan Documents, are hereby amended in all respects necessary to reflect that "Guarantor" (by whatever terminology is used to make reference thereto) shall mean and refer to AI, AMS, BTI, CEI, CPP, GI, HI, JCI, KPI, PPC, PFI, and RI.

2. Definitions.

(a) Article 1 of the Credit Agreement, Definitions, is hereby amended to delete the following existing definitions and insert the following therefor:

"Default Rate" means a variable per annum rate equal to the lesser of (1) two percent (2%) in excess of the interest rate otherwise payable hereunder, or (2) the maximum rate allowed by applicable Laws.

"Guarantors" means AI, AMS, BTI, CEI, CPP, GI, HI, JCL KPI, PPC, PFI, RI, and TI (viz., the members of the Borrower Consolidated Group other than Borrower, Brazilian LLC, BTL, OEP, AIC, AMM, AAP and TSL).

"Guaranty" means that certain Second Amended and Restated Guaranty dated as of April ___, 2017 together with any other guaranty agreement executed by any Guarantor in favor of Bank, as may be amended, restated or otherwise modified from time to time.

"Letter of Credit Commitment" means the lesser of (i) Thirty Million and 00/100 Dollars ($30,000,000.00) or (ii) the Unused Line of Credit Amount.

"Line of Credit Loan Maturity Date" means April ___, 2022.

"Material Adverse Change" means, with respect to any event, act, condition or occurrence of whatever nature (including events, acts, conditions or occurrences affecting the road construction equipment manufacturing industry generally and any changes in general economic or financial conditions or markets), whether singly or in conjunction with any other event or events, act or acts, condition or conditions, occurrence or occurrences, whether or not related, a material adverse change in, or a material adverse effect upon, any of (a) the financial condition, operations, business or properties of Borrower and the other Members of the Borrower Consolidated Group taken as a whole (either on a current or forecast economic or financial accounting basis), (b) the rights and remedies of Bank under the Loan Documents, or the ability of Borrower and the Members of the Borrower Consolidated Group, taken as a whole, to perform the obligations under the Loan Documents, taken as a whole, to which they are a party, or (c) the legality, validity or enforceability of any Loan Document.

"Permitted Acquisition" means any Acquisition (i) with an Acquisition amount of $100,000,000.00 or more if approved by Bank, and (ii) with an Acquisition amount of less than $100,000,000.00 if:

(A) The business acquired is a Permitted Line of Business;

(B) Any securities given as consideration therewith are securities of Borrower;

(C) Immediately after the Acquisition, the business so acquired (and the assets constituting such business) shall be owned and operated by Borrower or another Member of the Borrower Consolidated Group;

(D) No Default shall have occurred and be continuing at the time of the consummation of such Acquisition or would exist immediately after such Acquisition;

(E) With respect to any Acquisition with an acquisition amount of $10,000,000.00 or more, Borrower shall have delivered to Bank a pro-forma compliance certificate demonstrating that, on a pro-forma basis, after giving effect to the Acquisition, such Acquisition would not give rise to a Financial Covenant Default as of the consummation of the Acquisition, or a Financial Covenant Default during the one-year period following the consummation of such Acquisition; and

(F) Any other Acquisition that may be approved in writing by Bank from time to time.

"Unused Fee" means the fee payable by Borrower to Bank in arrears on each Quarter-End, as determined by Bank as of such Quarter-End in an amount equal to (A) the product of (i) 0.125%, multiplied by (ii) the daily average of the Unused Line of Credit Loan Amount during such Quarter, divided by (B) four (4).

(b) Article 1 of the Credit Agreement is hereby further amended to amend the definition of "LIBOR" and insert the following immediately after the period at the end of the definition:

Notwithstanding the foregoing, in no event shall LIBOR be less than 0.00%.

(c) Article 1 of the Credit Agreement is hereby further amended to amend the definition of "Obligations" and insert the following immediately after the period at the end of the definition:

Notwithstanding the foregoing or any other provision of this Agreement or any other Loan Document to the contrary, with respect to any Guarantor that is a Subsidiary of the Borrower, the Obligations do not include any Excluded Swap Obligations of such Subsidiary.

(d) Article 1 of the Credit Agreement is hereby further amended by deleting clause (H) of the definition of "Permitted Indebtedness" and inserting the following clause (H) therefor:

(H) Capital leases and purchase money Indebtedness in an aggregate amount not to exceed $20,000,000.00 at any one time outstanding;

(e) Article 1 of the Credit Agreement is hereby further amended by deleting clause (G) of the definition of "Permitted Investment" and inserting the following clause (G) therefor:

(G) (i) Investments in Domestic Subsidiaries and (ii) Investments in Foreign Subsidiaries after the First Amendment Date for purposes of this clause (ii) in an amount not to exceed $50,000,000.00;

(f) Article 1 of the Credit Agreement is hereby further amended by inserting the following definitions in the appropriate alphabetical order:

"Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. §1 *et seq*.), and any successor statute.

"Designated Jurisdiction" means any country or territory to the extent that such country or territory itself is the subject of any Sanction.

"Excluded Swap Obligation" means, with respect to any Guarantor that is a Subsidiary of the Borrower or another Borrower Party, any Wells Fargo Swap Obligation if, and to the extent that, all or a portion of the guaranty of such Subsidiary of, or the grant by such Subsidiary of a security interest to secure, such Wells Fargo Swap Obligation (or any guaranty thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Subsidiary's failure for any reason to constitute an "eligible contract participant" as defined in the Commodity Exchange Act and the regulations thereunder at the time the guaranty of such Subsidiary or the grant of such security interest becomes effective with respect to such Wells Fargo Swap Obligation. If a Wells Fargo Swap Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Wells Fargo Swap Obligation that is attributable to swaps for which such guaranty or security interest is or becomes illegal.

"First Amendment Date" means April ___, 2017.

"OFAC" means the Office of Foreign Assets Control of the United States Department of the Treasury.

"PFI" means Power Flame Incorporated, a Tennessee corporation.

"Sanction(s)" means any sanction administered or enforced by the United States Government (including OFAC), the United Nations Security Council, the European Union, Her Majesty's Treasury ("HMT") or other relevant sanctions authority.

"TSL" means Telestack, Ltd., a company organized under the laws of the United Kingdom.

3. Payments, Additional Costs, Etc. Article IV of the Credit Agreement, Payments, Additional Costs, Etc., is hereby amended by deleting the existing Section 4.2 and inserting the following therefor:

4.2. Late Payments. If any scheduled payment, whether principal, interest or principal and interest, is late, Borrower agrees to pay a late charge equal to the Default Rate for the amount of the payment which is late, but not more than the maximum amount allowed by applicable Laws. The foregoing provision shall not be deemed to excuse a late payment or be deemed a waiver of any other rights Bank may have under this Agreement, including, subject to the terms hereof, the right to declare the entire unpaid principal and interest immediately due and payable.

4. Representations and Warranties. Article VI of the Credit Agreement, Representations and Warranties, is hereby amended by inserting the following Section 6.22 immediately following Section 6.21:

6.22. OFAC. No Member of the Borrower Consolidated Group, or, to the knowledge of any Member of such Borrower Consolidated Group, any director, officer, employee, agent, affiliate or representative thereof, is an individual or entity that is, or is owned or controlled by any Person that is (i) currently the subject or target of any Sanctions , (ii) included on OFAC's List of Specially Designated Nationals, HMT's Consolidated List of Financial Sanctions Targets and the Investment Ban List, or any similar list enforced by any other relevant sanctions authority or (iii) located, organized or resident in a Designated Jurisdiction.

5. Covenants.

(a) Article VII of the Credit Agreement, Covenants, is hereby amended by inserting the following Section 7.1 (N) immediately following Section 7.1(M):

(N) If a Subsidiary is a U.S. Subsidiary (whether now existing or hereafter acquired or formed) and becomes a Material Member of the Borrower Consolidated Group, such Subsidiary shall execute and deliver a Guaranty or an amendment to the Guaranty, and such other documents and instruments as Bank may require evidencing that such Subsidiary shall become a Guarantor for all purposes of the Loan Documents (in each case, within 30 days of any creation, acquisition or qualification as a Material Member of the Borrower Consolidated Group).

(b) Article VII of the Credit Agreement, Covenants, is hereby further amended by deleting the existing Section 7.2(E) and inserting the following therefor:

(E) create or acquire any Subsidiary in connection with an Acquisition or otherwise, unless, if such Subsidiary is a U.S. Subsidiary, and after such creation or acquisition, such Subsidiary would be considered a Material Member of the Borrower Consolidated Group, such Subsidiary shall have executed and delivered a Guaranty or an amendment to the Guaranty, and such other documents and instruments as Bank may require evidencing that such Subsidiary shall have become a Guarantor for all purposes of the Loan Documents (in each case, within 30 days of any such creation or acquisition).

(c) Article VII of the Credit Agreement, Covenants, is hereby further amended by inserting the following Section 7.2(O) immediately following Section 7.2(N):

(O) Use the proceeds of any Line of Credit Advance, or lend, contribute or otherwise make available such proceeds to any Member of the Borrower Consolidated Group or its Subsidiaries, joint venture partner or other Person, (a) to fund any activities or business of or with any Person, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions, or (b) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the Line of Credit Loan, whether as underwriter, advisor, investor or otherwise).

(b) Article VII of the Credit Agreement, Covenants, is hereby further amended by deleting the existing Section 7.3(C) and inserting the following therefor:

(C) Intentionally Omitted.

6. **Default.** Article VIII of the Credit Agreement, Default, is hereby amended by deleting the existing Section 8.1(D) and inserting the following therefor:

(D) There shall occur any default or event of default (after the expiration of any applicable grace and cure period) under any agreement of any Member of the Borrower Consolidated Group with any Person and relating to the borrowing of money in excess of $25,000,000.00.

7. **Miscellaneous.** Article IX of the Credit Agreement, Miscellaneous, is hereby amended by deleting the existing Section 9.14 and inserting the following therefor:

9.14 Participation. Notwithstanding any other provision of this Agreement, each Borrower Party understands and agrees that Bank may, without the consent of any Borrower Party, enter into participation agreements with Participants whereby Bank will allocate certain percentages of its commitment to them, so long as Bank retains at least a majority of the rights and obligations under the Loan Documents, Upon the occurrence of an Event of Default, Borrower hereby grants to each such Participant, the right to set off deposit accounts maintained by Borrower with such Participant in accordance with this Agreement. Each Borrower Party understands and agrees that Bank may assign to one or more assignees all or a portion of its rights and obligations hereunder (including all or a portion of its Line of Credit and the Line of Credit Loan Advances at the time owing to it) with the prior written consent of the Borrower (such consent not to be unreasonably withheld, conditioned or delayed), *provided, however*, (i) the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to Bank within five (5) Business Days after having received notice thereof, (ii) no consent of the Borrower shall be required for an assignment to an Affiliate of Bank, and (iii) no consent of the Borrower shall be required if an Event of Default has occurred and is continuing. Each Member of the Borrower Consolidated Group authorizes Bank to disclose financial and other information regarding such Person to Participants, assignees, potential Participants and potential assignees.

8. **Notices.** Article X of the Credit Agreement, Notices, is hereby amended by deleting the existing clause (B) of Section 10.1 and substituting the following therefor:

(B) If to Bank:

Wells Fargo Bank, National Association
Commercial Banking Group
3100 West End Avenue, Suite 900
Nashville, Tennessee 37203
Attention: Marsha Moffitt

with a copy to:
Felix R. Dowsley, III, Esq.
Bass, Berry & Sims PLC
150 Third Avenue South, Suite 2800
Nashville, Tennessee 37201

9. **Exhibit A.** Exhibit A to the Credit Agreement, Form of Compliance Certificate, is hereby modified and amended to delete the existing Exhibit A and insert the Exhibit A attached hereto.

10. **Schedule 6.4.** Notwithstanding anything to the contrary contained in the Credit Agreement, Schedule 6.4 attached hereto is a complete and accurate list of all of the Material Contracts as of the date hereof.

11. **Effectiveness.** This Amendment shall be effective only upon the satisfaction of the following conditions:

(a) The Borrower Parties and the Bank shall have executed and delivered a counterpart of this Amendment;

(b) The Borrower Parties and the Bank shall have executed and delivered a counterpart of the Guaranty;

(c) PFI shall have executed and delivered a certificate of an officer or other representative acceptable to Bank dated as of the date of this Amendment, certifying as to the incumbency and signatures of the representatives of such Person signing, the Loan Documents together with the following documents attached thereto: (i) a copy of the resolutions of PFI's Governing Body authorizing the execution, delivery and performance of the Loan Documents, (ii) a copy certificate as of the most recent date practicable by the secretary of state (or similar Governmental Authority) of the state of Tennessee, of PFI's Organizational Documents filed with such secretary of state (or similar Governmental Authority), (iii) a copy of PFI's other Organizational Documents; and (iv) a certificate of the most recent date practicable of the secretary of state (or similar appropriate Governmental Authority) of each Jurisdiction in which PFI is organized as to the existence and good standing of PFI within such Jurisdiction;

(d) A certificate, as of the most recent date practicable, of the secretary of state (or similar appropriate Governmental Authority) of each Jurisdiction where each Borrower Party is organized as to the existence and good standing of each such Borrower Power within such Jurisdiction;

(e) Each of the representations and warranties of the Members of the Borrower Consolidated Group contained in Sections 10, 12 and 13 shall be true and correct in all material respects as of the date as of which all of the other conditions contained in this Section 11 shall have been satisfied; and

(f) The Bank shall have received such documents, instruments, certificates, opinions and approvals as it reasonably may have requested.

12. **Organization, Good Standing, Requisite Power and Authorization, Enforceability.**

(a) Each Borrower Party is a corporation duly organized, validly existing and in good standing under the laws of the state of its organization. Each Borrower Party has all requisite power, authority and legal right to execute and deliver this Amendment and all other instruments and documents to be executed and delivered by such Borrower Party pursuant to this Amendment and to perform and observe the provisions thereof and to carry out the transactions contemplated thereby. All actions on the part of any Member of the Borrower Consolidated Group that are required for the execution and delivery of this Amendment and the other Loan Documents and the performance and observance of the provisions thereof by such Member have been duly authorized and effectively taken.

(b) This Amendment will constitute, upon execution and delivery thereof, shall constitute, legal, valid and binding obligations of the Borrower Parties, enforceable against such Borrower Party in accordance with their respective terms, except as enforcement thereof may be limited by bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors' rights generally.

13. **Representations and Warranties.** As an inducement to the Bank to enter into this Amendment, each Member of the Borrower Consolidated Group hereby represents and warrants that after giving effect to this Amendment (provided that it is understood that (i) with respect to Brazilian LLC, BTL, OEP, TSL, AMM and AAP, such representations and warranties are being made on their behalf by the Borrower, and (ii) each such Person is making its representations only on its own behalf, and only to the extent of its knowledge with respect to any other Member of the Borrower Consolidated Group):

(a) the representations and warranties set forth in Article VI of the Credit Agreement are true and correct in all material respects on and as of the date of this Amendment except for representations and warranties that expressly relate to an earlier date, which remain true and correct as of said earlier date;

(b) no Default or Event of Default exists under the Credit Agreement, any of the other Loan Documents or any other documents executed in connection therewith; and

(c) no authorization, consent, license, or exemption from, or filing or registration with, any Governmental Authority, nor any material approval or consent of any other Person, is or will be necessary to the valid execution, delivery, or material performance by the parties thereto of this Amendment or of any other instrument or document executed and delivered in connection therewith, except for such thereof that have heretofore been obtained and remain in full force and effect.

14. **Reaffirmation; Effect of Amendment; Continuing Effectiveness of Credit Agreement and Loan Documents.**

(a) Each Borrower Party (i) acknowledges and consents to all of the terms and conditions of this Amendment, (ii) affirms all of its obligations under the Loan Documents as amended hereby, and (iii) agrees that this Amendment and all documents executed in connection herewith do not operate to reduce or discharge any Borrower Party's obligations under the Loan Documents.

(b) Neither this Amendment nor any other indulgences that may have been granted to any Member of the Borrower Consolidated Group by the Bank shall constitute a course of dealing or otherwise obligate the Bank to modify, expand or extend the agreements contained herein, to agree to any other amendments to the Credit Agreement or to grant any consent to, waiver of or indulgence with respect to any other noncompliance with any provision of the Loan Documents.

(c) Neither this Amendment, nor the failure to exercise or any delay in the exercise of any right or remedy of the Bank under the Loan Documents shall constitute a waiver of any of the rights or remedies of the Bank arising under the Credit Agreement, any other Loan Document or otherwise, and no single or partial exercise of any such rights or remedies shall preclude any other or further exercise of any rights or remedies of the Bank under the Loan Documents or the exercise of any other right.

(d) Upon and after the effectiveness of this Amendment, each reference in the Credit Agreement to "this Agreement," "hereunder," "hereof" or words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to "the Credit Agreement," "thereunder," "thereof" or words of like import referring to the Credit Agreement, shall mean and be a reference to the Credit Agreement as modified hereby. This Amendment shall constitute a Loan Document for all purposes of the Credit Agreement and the other Loan Documents.

(e) Any noncompliance by any Member of the Borrower Consolidated Group with any of the covenants, terms, conditions or provisions of this Amendment shall constitute an Event of Default.

(f) Except to the extent amended or modified hereby, the Credit Agreement, the other Loan Documents and all terms, conditions and provisions thereof shall continue in full force and effect in all respects and shall be construed in accordance with the modifications of the Credit Agreement effected hereby. Without limiting the generality of the foregoing, the Collateral secures and shall continue to secure the payment of all obligations with respect to the Loan Documents, in each case taking into account the modifications of the Credit Agreement effected hereby.

15. **Release and Waiver.** The Borrower on behalf of itself and Brazilian LLC, BTL, OEP, TSL, AMM and AAP and each other Borrower Party hereby acknowledge and stipulate that it has no claims or causes of action of any kind whatsoever against the Bank, its affiliates, officers, directors, employees or agents. Each Borrower Party represents that it is entering this Amendment freely, and with the advice of counsel as to its legal alternatives. The Borrower on behalf of itself and Brazilian LLC, BTL, OEP, TSL, AMM and AAP and each other Borrower Party hereby release the Bank, its affiliates, officers, directors, employees and agents, from any and all claims, causes of action, demands and liabilities of any kind whatsoever whether direct or indirect, fixed or contingent, liquidated or unliquidated, disputed or undisputed, known or unknown, which such Member of the Borrower Consolidated Group has or may acquire in the future relating in any way to any event, circumstance, action or failure to act to the date of this Amendment, *excluding, however,* claims or causes of actions resulting solely from the Bank's own gross negligence or willful misconduct. The release by the Borrower Parties herein, together with the other terms and provisions of this Amendment, are executed by the Borrower Parties advisedly and without coercion or duress from the Bank, each Borrower Party having determined that the execution of this Amendment, and all of its terms, conditions and provisions are in such Borrower Party's economic best interest.

16. **Further Actions.** Each of the parties to this Amendment agrees that at any time and from time to time upon written request of any other party, it will execute and deliver such further documents and do such further acts and things as such other party reasonably may request in order to effect the intents and purposes of this Amendment.

17. **Counterparts.** This Amendment may be executed in multiple counterparts or copies, each of which shall be deemed an original hereof for all purposes. One or more counterparts or copies of this Amendment may be executed by one or more of the parties hereto, and some different counterparts or copies executed by one or more of the other parties. Each counterpart or copy hereof executed by any party hereto shall be binding upon the party executing same even though other parties may execute one or more different counterparts or copies, and all counterparts or copies hereof so executed shall constitute but one and the same agreement. Each party hereto, by execution of one or more counterparts or copies hereof, expressly authorizes and directs any other party hereto to detach the signature pages and any corresponding acknowledgment, attestation, witness or similar pages relating thereto from any such counterpart or copy hereof executed by the authorizing party and affix same to one or more other identical counterparts or copies hereof so that upon execution of multiple counterparts or copies hereof by all parties hereto, there shall be one or more counterparts or copies hereof to which is(are) attached signature pages containing signatures of all parties hereto and any corresponding acknowledgment, attestation, witness or similar pages relating thereto.

18. **Miscellaneous.**

(a) Except as amended hereby, the Credit Agreement shall remain in full force and effect. This Amendment does not constitute a waiver of any Event of Default, whether or not the Bank is aware of any such Event of Default.

(b) This Amendment shall be governed by, construed and enforced in accordance with the laws of the State of Tennessee, without reference to the conflicts or choice of law principles thereof.

(c) The headings in this Amendment and the usage herein of defined terms are for convenience of reference only, and shall not be construed as amplifying, limiting or otherwise affecting the substantive provisions hereof.

(d) All references herein to the preamble, the recitals or sections, paragraphs, subparagraphs, annexes or exhibits are to the preamble, recitals, sections, paragraphs, subparagraphs, annexes and exhibits of or to this Amendment unless otherwise specified. The words "hereof", "herein" and "hereunder" and words of similar import, when used in this Amendment, refer to this Amendment as a whole and not to any particular provision of this Amendment.

(e) Any reference herein to any instrument, document or agreement, by whatever terminology used, shall be deemed to include any and all amendments, modifications, supplements, extensions, renewals, substitutions and/or replacements thereof as the context may require.

(f) When used herein, (1) the singular shall include the plural, and vice versa, and the use of the masculine, feminine or neuter gender shall include all other genders, as appropriate, (2) "include", "includes" and "including" shall be deemed to be followed by "without limitation" regardless of whether such words or words of like import in fact follow same, and (3) unless the context clearly indicates otherwise, the disjunctive "or" shall include the conjunctive "and".

[Remainder of page intentionally left blank. Signature pages follow.]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

BORROWER PARTIES:

ASTEC INDUSTRIES, INC.,
a Tennessee corporation

By:/s/David C. Silvious
Name:David C. Silvious
Title:VP, CFO

ASTEC, INC.,
a Tennessee corporation

By:/s/David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

ASTEC MOBILE SCREENS, INC.,
a Nevada corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

BREAKER TECHNOLOGY, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

CEI ENTERPRISES, INC.,
a Tennessee corporation

By:/s/David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

CARLSON PAVING PRODUCTS, INC.,
a Washington corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

GEFCO, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secrretary/Treasurer

HEATEC, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

JOHNSON CRUSHERS INTERNATIONAL, INC.,
a Tennessee corporation

By:/s/David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

KOLBERG-PIONEER, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

PETERSON PACIFIC CORP.,
an Oregon corporation

By:/s/ David C. Silvious
Name:David c. Silvious
Title:Asst. Secretary/Treasurer

POWER FLAME INCORPORATED.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

ROADTEC, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

TELSMITH, INC.,
a Delaware corporation

By:/s/ David C. Silvious
Name:David C. Silvious
Title:Asst. Secretary/Treasurer

[Bank signature page continues on following page]

BANK: WELLS FARGO BANK, NATIONAL ASSOCIATION,
a national banking association

By:
Name:
Title:

EXHIBIT A

FORM OF COMPLIANCE CERTIFICATE

To: Wells Fargo Bank, National Association
Commercial Banking Group
3100 West End Avenue, Suite 900
Nashville, Tennessee 37203

Pursuant to that certain Amended and Restated Credit Agreement, dated as of April 12, 2012 (as amended from time to time, the "Credit Agreement", capitalized terms used herein as therein defined), among Astec Industries, Inc., a Tennessee corporation (the "Borrower"), Astec, Inc., a Tennessee corporation ("AI"), Astec Mobile Screens, Inc., a Nevada corporation ("AMS"), Breaker Technology, Inc., a Tennessee corporation ("BTI"), CEI Enterprises, Inc., a Tennessee corporation ("CEI"), Carlson Paving Products, Inc., a Washington corporation ("CPP"), GEFCO, Inc., a Tennessee corporation ("GI"), Heatec, Inc., a Tennessee corporation ("HI"), Johnson Crushers International, Inc., a Tennessee corporation ("JCI"), Kolberg-Pioneer, Inc., a Tennessee corporation ("KPI"), Peterson Pacific Corp., an Oregon corporation ("PPC"), Power Flame Incorporation, a Tennessee corporation ("PFI"), Roadtec, Inc., a Tennessee corporation ("RI"), Telsmith, Inc., a Delaware corporation ("TI"; together with AI, AMS, BTI, CEI, CPP, GI, HI, JCI, KPI, PPC, PFI, and RI, each a "Guarantor" and individually and collectively, the "Guarantors"), and Wells Fargo Bank, National Association, a national banking association (the "Bank"), the undersigned submits this Compliance Certificate and certifies that the covenants and financial tests described in the Credit Agreement are as follows:

I.	**Financial Statements and Reports**	Compliance (Please Indicate)	
A.	Annual CPA audited, consolidated Fiscal Year-End financial statements of Borrower Consolidated Group within 120 days after each Fiscal Year-End	Yes	No
B.	Annual management-prepared consolidating Fiscal Year-End financial statements of each Member of the Borrower Consolidated Group within 120 days after each Fiscal Year-End	Yes	No
C.	Quarterly management-prepared consolidating financial statements of Borrower Consolidated Group within 45 days after each Quarter-End	Yes	No

II.	**Tangible Net Worth**	Compliance (Please Indicate)	
	Minimum of $400,000,000 required	Yes	No
	Actual Tangible Net Worth for this reporting period equals $________________		

III.	**Net Income**	Compliance (Please Indicate)	
	Amount greater than $0.00 required	Yes	No
	Actual Net Income for this reporting period equals $________________		

A. The undersigned represents and warrants to the Bank that the undersigned has individually reviewed the provisions of the Credit Agreement and that a review of the activities of the Borrower during the period covered by this Compliance Certificate has been made by or under the supervision of the undersigned with a view to determining whether the Borrower has kept, observed, performed and fulfilled all of its obligations under the Credit Agreement.

B. The Borrower has observed and performed each and every undertaking contained in the Credit Agreement, and no Default or Event of Default has occurred and is continuing.

C. That all information set forth in this Compliance Certificate is true, complete, and accurate.

Executed this _______ day of ______________________, 20____.

ASTEC INDUSTRIES, INC.,
for itself and as Agent for the other Members of the Borrower Consolidated Group

By:
Name:
Title:

SCHEDULE 6.4

MATERIAL CONTRACTS

Federal Acquisition Regulation Contract Number W56HZV-11-D-0112, dated as of September 26, 2011 and amended as of November 18, 2011, January 6, 2012 and April 2, 2012, by and between Astec Industries, Inc. and U.S. Army Contracting Command.

SECOND AMENDED AND RESTATED GUARANTY

THIS SECOND AMENDED AND RESTATED GUARANTY (this "Agreement") is made as of April 12, 2017, by **ASTEC, INC.,** a Tennessee corporation ("AI"), **ASTEC MOBILE SCREENS, INC.,** a Nevada corporation, **BREAKER TECHNOLOGY, INC.,** a Tennessee corporation, **CEI ENTERPRISES, INC.,** a Tennessee corporation, **CARLSON PAVING PRODUCTS, INC.,** a Washington corporation, **GEFCO, INC.,** a Tennessee corporation, **HEATEC, INC.,** a Tennessee corporation, **JOHNSON CRUSHERS INTERNATIONAL, INC.,** a Tennessee corporation, **KOLBERG-PIONEER, INC.,** a Tennessee corporation, **PETERSON PACIFIC CORP.,** an Oregon corporation, **POWER FLAME INCORPORATED**, a Tennessee corporation, **ROADTEC, INC.,** a Tennessee corporation, and **TELSMITH, INC.,** a Delaware corporation (collectively, the "Guarantors" and each singularly, a "Guarantor"). As used in this Agreement, except as otherwise defined herein or unless the context may clearly require to the contrary, all capitalized words and phrases shall have the meaning attributed to them in that certain Amended and Restated Credit Agreement dated as of April 12, 2012 among Astec Industries, Inc. (the "Borrower"), Guarantors and Wells Fargo Bank, National Association, a national banking association (successor by merger to Wachovia Bank, National Association) (the "Bank"), as amended by that certain First Amendment to Amended and Restated Credit Agreement of even date herewith (as the same may be further amended or modified from time to time, the "Credit Agreement").

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Guarantors agree, covenant and represent as follows:

1.

(a) Guarantors hereby jointly and severally, absolutely and unconditionally, guarantee to Bank Parties the due, regular and punctual payment and prompt performance of the Obligations, including payment of all Default Costs.

(b) This Guaranty is an unconditional guaranty, and Guarantors agree that, upon the occurrence of an Event of Default, no Bank Party shall be required to assert any claim or cause of action against any Borrower Party or any other Person before asserting any claim or cause of action against any Guarantor under this Agreement. Furthermore, Guarantors agree that Bank Parties shall not be required to pursue or foreclose on any collateral that they may receive from any Borrower Party or others as security for any Obligations before making a claim or asserting a cause of action against any Guarantor under this Agreement.

(c) The failure of any Bank Party to perfect any portion of its security interest in collateral now or hereafter securing all or any part of the Obligations, shall not release any Guarantor from such Guarantor's liabilities and obligations hereunder.

(d) To the extent permitted by law: notice of acceptance of this Agreement and of any default by any Borrower Party is hereby waived by Guarantors; presentment, protest, demand, and notice of protest and demand of any and all collateral, and of the exercise of possessory remedies or foreclosure on any and all collateral received by any Bank Party from any Borrower Party are hereby waived; and all settlements, compromises, compositions, accounts stated, and agreed balances in good faith between any primary or secondary obligors on any accounts received as collateral shall be binding upon Guarantors.

(e) This Agreement shall not be affected, modified, or impaired by the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all of the assets, marshaling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, arrangements, composition with creditors or readjustment of, or other similar proceedings affecting any Borrower Party or any other Person, or any of the assets belonging to one or more of them, nor shall this Agreement be affected, modified or impaired by the invalidity of any Note, the Credit Agreement, any of the other Loan Documents, any Wells Fargo Swap Document or any other document executed by any Borrower Party in connection with any Loan.

(f) Without notice to any Guarantor, without the consent of any Guarantor, and without affecting or limiting any Guarantor's liability hereunder, Bank Parties may:

(i) grant any Borrower Party extensions of time for payment of the Obligations or any party thereof;

(ii) renew any of the Obligations;

(iii) grant any Borrower Party extensions of time for performance of agreements or other indulgences;

(iv) at any time release any or all of the collateral held by any Bank Party as security for the Obligations;

(v) at any time release any other guarantor from such guarantor's guarantee of any of the Obligations;

(vi) compromise, settle, release, or terminate any or all of the obligations, covenants, or agreement of any Borrower Party under any Note, the Credit Agreement, any one or more of the other Loan Documents, or any Wells Fargo Swap Document; and

(vii) with the written consent of Borrower, modify or amend any obligation, covenant or agreement of Borrower set forth in any Note, the Credit Agreement, the other Loan Documents, or any Wells Fargo Swap Document.

(g) This Agreement may not be terminated by any Guarantor until such time as all Obligations, including any renewals or extensions thereof, have been paid and performed in full and such payments and performance of the Obligations have become final and are not subject to being refunded as a preference or fraudulent transfer under Bankruptcy Law or other applicable Law.

2. Each Guarantor represents and warrants to Bank Parties and covenants that such Guarantor has full power and unrestricted right to enter into this Agreement, to incur the obligations provided for herein, and to execute and deliver the same, and that when executed and delivered, this Agreement will constitute a valid and legally binding obligation of such Guarantor, enforceable in accordance with its terms (except as may be limited by applicable Bankruptcy Laws and other Laws affecting the enforceability of creditors' rights generally and principles of equity). Each Guarantor acknowledges that Bank Parties are relying upon such Guarantor's covenants herein in extending credit to Borrower, and each Guarantor undertakes to perform such Guarantor's obligations hereunder promptly and in good faith.

3. Each Guarantor covenants and agrees that so long as the Obligations are outstanding, such Guarantor will from time to time upon request, furnish to Bank Parties such information regarding the business affairs, finances, and conditions of such Guarantor and such Guarantor's properties as may be required of such Guarantor under the Credit Agreement.

4. Each Guarantor hereby subordinates to the Obligations any right to indemnification and subrogation or other rights of reimbursement that such Guarantor might have against Borrower or Borrower's estate.

5. Upon the occurrence of an Event of Default, if any Borrower Party is or shall hereafter be indebted to Bank for any obligations, liability or indebtedness other than the Obligations, and Bank should collect or receive any payments, funds or distributions which are not specifically required, by law or agreement, to be applied to the Obligations, Bank may, in its sole discretion, apply such payments, funds or distributions to indebtedness of any Borrower Party other than the Obligations.

6. This Agreement shall be binding upon, and inure to the benefit of, Guarantors, Bank Parties and their respective legal representatives, heirs, successors and assigns.

7. The validity, interpretation, enforcement and effect of this Agreement shall be governed by, and construed according to the laws of, the State of Tennessee. Each Guarantor and Bank consent that any legal action or proceeding arising hereunder shall be brought in the State and Federal courts in Tennessee, and assent and submit to the personal jurisdiction of any such courts in any such action or proceeding

8. GUARANTORS HEREBY WAIVE ANY RIGHT TO TRIAL BY JURY ON ANY CLAIM, COUNTERCLAIM, SETOFF, DEMAND, ACTION OR CAUSE OF ACTION ARISING OUT OF OR IN ANY WAY PERTAINING OR RELATING TO THIS AGREEMENT OR ANY OTHER INSTRUMENT, DOCUMENT OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR IN CONNECTION WITH THE TRANSACTIONS RELATED HERETO OR THERETO OR CONTEMPLATED HEREBY OR THEREBY OR THE EXERCISE OF ANY RIGHTS AND REMEDIES HEREUNDER OR THEREUNDER, IN ALL OF THE FOREGOING CASES WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE. GUARANTORS AGREE THAT ANY BANK PARTY MAY FILE A COPY OF THIS PARAGRAPH WITH ANY COURT AS WRITTEN EVIDENCE OF THE KNOWING, VOLUNTARY AND BARGAINED AGREEMENT OF GUARANTORS WITH BANK IRREVOCABLY TO WAIVE TRIAL BY JURY, AND THAT ANY DISPUTE OR CONTROVERSY WHATSOEVER BETWEEN THEM SHALL INSTEAD BE TRIED IN A COURT OF COMPETENT JURISDICTION BY A JUDGE SITTING WITHOUT A JURY.

9. In the event that any provision hereof is deemed to be invalid by reason of the operation of any law or by reason of the interpretation placed thereon by any court, this Agreement shall be construed as not containing such provisions and the invalidity of such provisions shall not affect other provisions hereof which are otherwise lawful and valid and shall remain in full force and effect.

10. Any notice or payment required hereunder or by reason of the application of any law shall be given and deemed delivered as provided in the Credit Agreement.

11. The failure at any time or times hereafter to require strict performance by Guarantors of any of the provisions, warranties, terms and conditions contained herein or in any other agreement, document or instrument now or hereafter executed by any Guarantor and delivered to any Bank Party relating to the Obligations shall not waive, affect or diminish any right of any Bank Party hereafter to demand strict compliance or performance therewith and with respect to any other provisions, warranties, terms and conditions contained in such agreements, documents and instruments, and any waiver of any default shall not waive or affect any other default, whether prior or subsequent thereto and whether of the same or a different type. None of the warranties, conditions, provisions and terms contained in this Agreement or in any agreement, document or instrument now or hereafter executed by any Guarantor and delivered to Bank relating to the Obligations shall be deemed to have been waived by any act or knowledge of Bank, its agents, officers or employees, but only by an instrument in writing, signed by an officer of Bank, and directed to Guarantors specifying such waiver.

12. The obligations of Guarantors under this Agreement will continue to be effective or be reinstated, as the case might be, if at any time any payment from any Borrower Party of any sum due to any Bank Party is rescinded or must otherwise be restored or returned by any Bank Party on the insolvency, Bankruptcy, dissolution, liquidation or reorganization of any Borrower Party or as a result of the appointment of a custodian, conservator, receiver, trustee or other officer with similar powers with respect to any Borrower Party's or any part of any Borrower Party's property or otherwise. If an event permitting the acceleration of the maturity of the Loans has occurred and is continuing and such acceleration is at such time prevented by reason of the pendency against any Borrower Party of a proceeding under any Bankruptcy Law, Guarantors agree that, for the purposes of this Agreement and the obligations of Guarantors under this Agreement, the maturity of the Loans will be deemed to have been accelerated with the same effect as if Bank had accelerated the same in accordance with the terms of the Credit Agreement, the Notes, any of the other Loan Documents or any other document executed in connection with the Loans, and Guarantors will immediately pay the unpaid balance of the Loans.

13. Guarantors will, on demand, reimburse Bank for all out-of-pocket expenses incurred by Bank in connection with the preparation, administration, amendment, modification or enforcement of this Agreement, and if at any time hereafter any Bank Party employs counsel to advise or provide other representation with respect to this Agreement or any other agreement, document or instrument heretofore, now or hereafter executed by any Guarantor and delivered to any Bank Party with respect to any Borrower Party or the Obligations, or to commence, defend or intervene, file a petition, complaint, answer, motion or other pleadings or to take any other action in or with respect to any suit or proceeding relating to this Agreement or any other agreement, instrument or document heretofore, now or hereafter executed by any Guarantor and delivered to any Bank Party with respect to any Borrower Party or the Obligations, or to represent any Bank Party in any litigation with respect to the affairs of any Guarantor, or to enforce any rights of Bank Parties or obligations of any Guarantor or any other Person which may be obligated to any Bank Party by virtue of this Agreement or any other agreement, document or instrument heretofore, now or hereafter delivered to any Bank Party by or for the benefit of any Guarantor with respect to any Borrower Party or the Obligations, or to collect from any Guarantor any amounts owing hereunder, then in any such event, all of the Attorneys' Fees incurred by any Bank Party arising from such services and any expenses, costs and charges relating thereto shall constitute additional obligations of Guarantors payable on demand.

14. Guarantors hereby waive any rights of exemption of property from levy or sale under execution or other process for the collection of debts under the Constitution or laws of the United States or any state thereof as to any of the obligations created hereunder.

15. This Agreement constitutes the entire agreement and supersedes all prior agreements and understandings, both oral and written, among Guarantors and Bank with respect to the subject matter hereof.

* * * * *

IN WITNESS WHEREOF, this instrument has been duly executed by Guarantors as of the day and year first above written

ASTEC, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

ASTEC MOBILE SCREENS, INC.,
a Nevada corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

BREAKER TECHNOLOGY, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

CEI ENTERPRISES, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

CARLSON PAVING PRODUCTS, INC.,
a Washington corporation

By:
David C. Silvious, its Assistant Secretary and Treasurer

GEFCO, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

HEATEC, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

JOHNSON CRUSHERS INTERNATIONAL,
INC., a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

KOLBERG-PIONEER, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

PETERSON PACIFIC, CORP.,
an Oregon corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

POWER FLAME INCORPORATED,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

ROADTEC, INC.,
a Tennessee corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

TELSMITH, INC.,
a Delaware corporation

By:/s/ David C. Silvious
David C. Silvious, its Assistant Secretary and Treasurer

Exhibit 31.1

Certification Pursuant To Rule 13a-14(a)/15d-14(a),
As Adopted Pursuant To

Section 302 of the Sarbanes-Oxley Act of 2002

I, Benjamin G. Brock certify that:

1. I have reviewed this quarterly report on Form 10-Q of Astec Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/Benjamin G. Brock
Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification Pursuant To Rule 13a-14(a)/15d-14(a),
As Adopted Pursuant To

Section 302 of the Sarbanes-Oxley Act of 2002

I, David C. Silvious certify that:

1. I have reviewed this quarterly report on Form 10-Q of Astec Industries, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 (e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/David C. Silvious

David C. Silvious
Chief Financial Officer, Vice President and Treasurer
(Principal Financial Officer)

Exhibit 32

Certification Pursuant To
Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934
and 18 U.S.C. Section 1350, As Adopted Pursuant To
Section 906 Of The Sarbanes-Oxley Act Of 2002

In connection with the Quarterly Report of Astec Industries, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Benjamin G. Brock and David C. Silvious certify, pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 Of The Sarbanes-Oxley Act Of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Benjamin G. Brock
Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)
May 8, 2017

/s/ David C. Silvious
David C. Silvious
Chief Financial Officer, Vice President and Treasurer
(Principal Financial Officer)
May 8, 2017