

PN 525 – 4/20/2018 - Steel Price Adjustment

A. General: This proposal note acknowledges fluctuations in the cost of manufactured steel used in the materials defined below and placed as part of the applicable construction work in the form of a pay adjustment. This proposal note will be used in bidding documents, including design-build projects only for as long as the price of the steel products set out below are subject to volatile spikes as determined solely by the Department.

These price adjustment provisions apply to items in the contract including any modified standard or non-standard item where the work to be performed involves the placement or installation of one or more of the steel products specified herein. The total price adjustment must be more than \$400.

The Department will post monthly adjustment indices for steel using data obtained in Table B-1.

For Category 1, Table B-1:

The Department will post monthly adjustment indices (BI and MI) for wide flange steel beams plus a scrap surcharge using data obtained from the steel producers listed.

http://www.stld-cci.com/pdf/Price_list.pdf

<http://www.gerdauameristeel.com/products/mp/pl.cfm>

<http://www.nucoryamato.com/>

For Category 2, Table B-1:

The Department will post monthly adjustment indices (BI and MI) for steel using data obtained on the last Wednesday of the month from the American Metal Market (**AMM**), based on the price for Steel Plate, Cut-to-length as reported for National Mills.

B. Price Adjustment Criteria and Conditions: The BI monthly values apply to projects sold during the same month in which the data is posted. The MI monthly values apply to projects for which qualifying items are shipped from the mill during the same month in which the data is posted. Adjustments will be made to the contract for fluctuations in the cost of steel used in the manufacture of the primary components of only the steel products listed in Table B-1:

Product Relationship Table B-1	
Steel Product (Title)	BI, MI
Category 1: Structural Steel Members, Levels UF, 1, 2, and 3 Steel H-Piling	Average of lowest and highest 27” to 36” tall, 10”-12” wide flange beams, up to 256 lbs./ft., prices plus scrap surcharge from Nucor-Yamato, SDI, and Gerdau Ameristeel
Category 2: Structural Steel Members, Levels 4, 5, and 6 Stay in-place steel casing (Piling & Caissons)	AMM Product Designation: Steel Plate, Cut-to-length (National Mills)

Nuts, bolts, rebar chairs, connecting bands and other miscellaneous hardware items shall not be included in the price adjustment. No other steel products shall be considered for a price adjustment.

Adjustments will only be made for fluctuations in the cost of the steel used in the above products as shipped from the producing mill. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

Adjustments may be positive, negative, or non-existent depending on the circumstances. Adjustments for the steel price will be calculated by the Engineer and processed by change order on the Contractor’s progress estimate.

No steel price adjustments will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

Furnish the following documentation for all Table B-1 steel products to be incorporated into the work. Submit all documentation to the Engineer prior to incorporation of the steel into the work. The Department will withhold progress payments if the documentation is not provided and at the discretion of the Engineer the work is allowed to proceed. Progress payments will be made upon receipt of the delinquent documentation. Submit separate documentation packages for each steel product in Table B-1 and for each quantity represented by items 2) c and d below. Label each documentation package with a unique number.

- 1) An affidavit signed by the Contractor, or Design-Build Team, (DBT) stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
 - a. Documentation package number: PN525 – (Insert the steel product “title” from Table B-1) – (Insert sequential package number beginning with “1”). Example: PN525 – Steel H Piling – 1, PN 525 – Structural Steel – 2, etc...

- b. The steel product quantity in pounds (kg).
- c. Steel Certification and Mill Test Reports for the steel product.
- d. The date the steel product, subject to adjustment, was shipped from the producing mill.

Upon the incorporation of the steel product into the work provide the Engineer the following:

- 1) An affidavit signed by the Contractor, or DBT stating that the documentation provided is true and accurate.
- 2) Identification of the steel product subject to adjustment.
 - a. Documentation package number that was initially established for the steel product for which the price adjustment will be calculated.
 - b. The actual steel product quantity in pounds (kg) that was incorporated into the work.

Price Adjustment Calculations

The below formulas allow for a variation in steel prices without recognizing cost increases/decreases within the range of - 90 % to 110% of the Bidding Index (BI). The total steel price adjustment (SPA) will not be computed unless the percent **% Change** is - 10% or more, increase or decrease:

$$\% \text{ Change} = [(MI/BI) - 1] \times 100$$

For a Price Increase:

$$SPA = [(MI/BI) - 1.10] \times BI \times (Q/100)$$

MI and BI are in terms of dollars (\$) per hundredweight (CWT). Therefore, Quantity (Q) of structural steel is divided by 100.

Example: If the Project was bid on 4/8/2008, the BI for a category 1 pay item in March 2008 is \$46.48. If wide flange beams have a documented weight of 34500 pounds and the mill date of 9/8/2009, the MI for September 2008 is \$60.23

Check threshold:

$$\% \text{ Change} = [(\$60.23/CWT / \$46.48/CWT) - 1] \times 100 = 29.58,$$

Is ABS (29.58) > 10? Yes

$$\begin{aligned} \text{Calculate SPA} &= [(\$60.23/CWT / \$46.48/CWT) - 1.10] \times \$46.48/CWT \times 34,500 \text{ lbs}/100 \\ &= \$3,140.19 \text{ (positive adjustment)} \end{aligned}$$

For a Price Decrease:

$$SPA = [(MI/BI) - 0.90] \times BI \times (Q/100)$$

MI and BI are in terms of dollars (\$) per hundredweight (CWT). Therefore, Quantity (Q) of structural steel is divided by 100.

Example: If the Project was bid on 1/8/2009, the BI for a category 1 pay item in January 2009 is \$47.83. If wide flange beams have a documented weight of 34500 pounds and the mill date of 4/8/2009, the MI for April 2009 is \$37.38.

Check threshold:

$$\% \text{ Change} = [(\$37.38/\text{CWT}/\$47.83/\text{CWT}) - 1] \times 100 = -21.85,$$

Is ABS (-21.85) > 10? Yes

$$\begin{aligned} \text{Calculate SPA} &= [(\$37.38/\text{CWT}/\$47.83/\text{CWT}) - 0.90] \times \$47.83/\text{CWT} \times 34,500 \text{ lbs}/100 \\ &= -\$1,955.12 \text{-(negative adjustment)} \end{aligned}$$

Where:

SPA = Steel Price Adjustment

MI = Mill Shipping Index. – in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill and properly documented. The adjustment indices will be posted on ODOT’s website.

BI = Bidding Index. - in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month in which the project is bid. The adjustment indices will be posted on ODOT’s website.

Q = Quantity of the steel product, pounds actually incorporated into the work as documented by the Contractor, or DBT and verified by the Engineer.

C. Price Adjustment Limitations: The price adjustments are limited to a % Change of 50%, increase or decrease.

Example 1: When the Project was bid, the BI for a category 1 pay item with a quantity of 50,000 pounds, was \$39.00, and the MI for the month in which the steel was shipped was \$60.23.

Check threshold:

$$\% \text{ Change} = [(\$60.23/\text{CWT}/\$39.00/\text{CWT})-1] \times 100 = 54.44\%$$

The limit is 50%, thus the SPA is calculated as follows:

$$\text{SPA} = [1.50 - 1.10] \times \text{BI} \times (\text{Q}/100)$$

$$\begin{aligned} \text{SPA} &= [1.50-1.10] \times \$39.00/\text{CWT} \times 50,000 \text{ lbs}/100 \\ &= \$7,800.00 \end{aligned}$$

Example 2: When the Project was bid, the BI for a category 1 pay item with a quantity of 50,000 pounds, was \$60.23, and the MI for the month in which the steel was shipped was \$29.00

Check threshold:

$$\% \text{ Change} = [(\$29.00/\text{CWT}/\$60.23/\text{CWT})-1] \times 100 = -51.85\%$$

The limit is -50 %, thus the SPA is calculated as follows:

$$\text{SPA} = [0.50-0.90] \times \text{BI} \times \text{Q}$$

$$\begin{aligned} \text{SPA} &= [0.50-0.90] \times \$60.23/\text{CWT} \times 50,000 \text{ lbs}/100 \\ &= -\$12,046.00 \end{aligned}$$

D. Payment/Deductions: The price adjustment will be paid, or deducted from the Contractor's, or DBT's progress estimate, upon approval of a change order.

If the price adjustment is based on estimated material quantities for that time, and a revision to the total material quantity is made in a subsequent or final estimate, an appropriate adjustment will be made to the price adjustment previously calculated. The adjustment will be based on the same indices used to calculate the price adjustment which is being revised. If the shipping date(s) of the revised material quantity cannot be determined, the adjustment for the quantity in question, will be based on the indices utilized to calculate the steel price adjustment for the last initial documentation package submission, for the steel product subject to adjustment, that was incorporated into the particular item of work, for which quantities are being finalized.

Example: Structural steel for a particular bridge was provided for in three different shipments with each having a different mill shipping date. The quantity of structural steel actually used for the bridge was calculated and a steel price adjustment was made in a progress payment. At the conclusion of the work an error was found in the calculation of the final quantity of structural steel used for the bridge. The quantity to be adjusted can not be directly related to any one of the three mill shipping dates. The steel price adjustment for the quantity in question would be calculated using the indices that were utilized to calculate the steel price adjustment for the quantity of

structural steel represented by the last initial structural steel documentation package submission. The package used would be the one with the greatest sequential number.

E. Mill Index after the Approved Completion Date: When steel products are shipped from the mill after the approved contract completion date, steel price adjustments will be based on the MI for the month of the approved contract completion date or the MI for the actual month the steel was shipped, using whichever MI is less.

F. Documentation Review: The Department reserves the right to inspect the records of the Contractor or DBT, its subcontractors, material fabricators and suppliers to verify the accuracy of the documentation submitted to the Department.

G. Extra Work/Force Account: When steel product, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of C&MS Section 109, no steel price adjustments will be made for any products manufactured from steel having a mill shipping date 5 business days after the Department's request. Price adjustments will be made as provided herein however the BI shall be based on the month of the Department's request. The MI will be based on the month the steel was shipped from the producing mill and after the Extra Work request. For extra work performed on force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel and no steel price adjustments will be made.

Designer Note:

For use on all projects expected to be constructed over a time period of more than one year AND that require steel products listed in Table B-1 of the proposal note.

Designers who have questions on application of this note should contact the Structures Staff Specialist, Office of Construction Administration at 614-644-6628.