

## PN 525 - 8/2/2004 - 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 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. It is not the intention of the Department to make this proposal note permanent.

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 Department will publish a monthly adjustment index for steel using data obtained from the United States Department of Labor (USDOL), Bureau of Labor Statistics (**BLS**) Producer Price Index (**PPI**), using the average of Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017). This monthly index is listed as preliminary for four (4) months after initial publication. The Engineer will use the preliminary index data to compute progressive monthly adjustments with final adjustments occurring when the BLS data is finalized or at project closeout using the preliminary data, whichever occurs earlier. The Department will publish a monthly cost basis (**CB**) for steel using data obtained on the last Wednesday of the month from the American Metal Market (**AMM**). The cost basis shall determine the raw steel material price for Steel Plate, Cut-to-length as reported for National Mills; Steel – Rod, high carbon (1050) industrial quality as reported for the United States; and Steel – Bar, Merchant Products, Reinforcing Bar, as reported for the United States by the American Metal Market.

**B. Price Adjustment Criteria and Conditions:** 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:

<b>Product Relationship Table B-1</b>		
<b>Steel Product (Title)</b>	<b>AMM Product Designation (CB)</b>	<b>USDOL-BLS PPI (MI, BI)</b>
Steel Piling and stay in-place steel casing Structural Steel Structural Steel Expansion/ Contraction Joints Steel Bearing Devices Guardrail Steel Traffic Strain Poles, Supports, and Mast Arms Steel Light Towers, Poles, and Mast Arms Sign Ground Mounted Beam Supports, Rigid Overhead Supports, and Span Wire Supports Steel Railing Corrugated Steel Pipe	Steel Plate, Cut-to-length (National Mills)	Average of,  Metals and Metal Products (WPU10),  Iron and Steel (WPU101),  and Steel Mill Products (WPU1017)
Prestress and Post tensioning strand	Steel – Rod, high carbon (1050) industrial quality (United States)	
Reinforcing Steel	Steel – Bar, Merchant Products, Reinforcing Bar (United States)	

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 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 – Guardrail – 1, PN 525 – Reinforcing 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 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 95% to 105% of the Bidding Index (BI). The total steel price adjustment (SPA) will not be computed unless the percent **% Change** is 5% or more, increase or decrease:

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

### For a Price Increase:

$$SPA = [(MI/BI) - 1.05] \times CB \times Q$$

**Example:** If the average PPI for the month in which the project is let is 110 and the average PPI for the month in which the steel is shipped from the mill is 165 and the Cost Basis (CB) on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment increase would be calculated as follows.

$$SPA = [(165/110) - 1.05] \times 0.32 \times 50,000 = \$7,200.00 \text{ (Increase)}$$

### For a Price Decrease:

$$SPA = [(MI/BI) - 0.95] \times CB \times Q$$

**Example:** If the average PPI for the month in which the project is let is 165 and the average PPI for the month in which the steel is shipped from the mill is 120 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment decrease would be calculated as follows.

$$SPA = [(120/165) - 0.95] \times 0.32 \times 50,000 = - \$3,563.64 \text{ (Decrease)}$$

Where:

SPA = Steel Price Adjustment

MI = Mill Shipping Index. The average of the Producer Price Indices for Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017) as reported by the United States Department of Labor, Bureau of Labor Statistics for the month the steel was shipped from the producing mill.

BI = Bidding Index. The average of the Producer Price Indices for Metals and Metal Products (WPU10), Iron and Steel (WPU101), and Steel Mill Products (WPU1017) as reported by the United States Department of Labor, Bureau of Labor Statistics for the month proceeding the month in which the project is bid.

CB = Cost Basis. The Consumer Buying Price Index value for either Steel – Bar, Merchant Products, Reinforcing Bar (United States); or Steel – Rod, high carbon (1050) industrial quality (United States); or Steel Plate, Cut-to-length (National Mills) as published by the American Metal Market (AMM) on the last Wednesday of the month preceding the month in which the project is bid. The CB (Cost Basis) shall be established for the product relationships listed in Table B-1 and shall establish the raw material base price. The price shall be adjusted to dollars per pound (kg).

Q = Quantity of the steel product, pounds (kg) actually incorporated into the work as documented by the Contractor and verified by the Engineer

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

**Example 1:** If the average PPI for the month in which the project is let is 110 and the average PPI for the month in which the steel is shipped from the mill is 171 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment increase would be calculated as follows.

$$\% \text{ Change} = [(171/110)-1] \times 100 = 55.45\%$$

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

$$\text{SPA} = [(1.50) - 1.05] \times 0.32 \times 50,000 = \$7,200.00 \text{ (Increase)}$$

**Example 2:** If the average PPI for the month in which the project is let is 165 and the average PPI for the month in which the steel is shipped from the mill is 70 and the CB on the last Wednesday of the month preceding the letting date is \$0.32 per pound for a quantity of 50,000 pounds, then the price adjustment decrease would be calculated as follows.

$$\% \text{ Change} = [(70/165)-1] \times 100 = -57.58\%$$

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

$$\text{SPA} = [(0.50) - 0.95] \times 0.32 \times 50,000 = - \$7,200.00 \text{ (Decrease)}$$

**D. Payment/Deductions:** The price adjustment will be paid, or deducted from the Contractor's progress estimate, upon approval of a change order. The Engineer will use the preliminary BI and MI index data to compute progressive monthly adjustments with final adjustments occurring when the BLS data is finalized, (four months after initial publication) or at project closeout using the preliminary data, whichever occurs earlier.

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:** Reinforcing steel for a particular bridge deck was provided for in three different shipments with each having a different mill shipping date. The quantity of reinforcing steel actually incorporated into the deck 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 reinforcing steel incorporated into the deck. 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 reinforcing steel represented by the last initial reinforcing steel documentation package submission. The package used would be the one with the greatest sequential number.

**E. Expiration of Contract Time:** When steel products are shipped from the mill after expiration of contract time and liquidated damages are chargeable, steel price adjustments will be based on the MI for the month in which contract time expired.

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

**G. Extra Work/Force Account:** When steel products , 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 preceding the 5<sup>th</sup> business day after the Department's request. Moreover the CB shall be based on the applicable AMM Consumer Buying Price Index as published on the last Wednesday of the month preceding the 5<sup>th</sup> business day after the Department's 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.