

## CONSTRUCTION WEBINAR

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# PROTECT YOURSELF

Strategies for Contractors to Survive Surging Prices  
and Materials Shortage Delays

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# Speakers



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# AGENDA

1. Causes of material price escalation
2. Examples of material price volatility
3. Eliminating or reducing the risk of material price escalation
  - **At the time of Bid**
  - **During the Procurement Phase**
  - **During the Construction Phase**
4. A “Material Purchase Agreement” template



# Causes of Material Price Escalation

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- Events that cause the price of materials to increase more than would be otherwise anticipated:
  - Inflation;
  - Fuel cost increases;
  - New regulations;
  - Taxes;
  - Tariffs and changes in trade policies;
  - Wars;
  - Disasters; or . . .

# Causes of Material Price Escalation

**GLOBAL  
PANDEMIC!!!**



# How Tariffs and Trade Policies Can Cause Price Escalations

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- Tariff implementation
- Trade agreements:
  - China – Trade war
  - India – Generalized System of Preferences – end favorable treatment
  - Turkey – same
  - U.S. pulled out from Trans-Pacific Partnership in 2017
  - Tariffs on Canadian lumber imports



# How Tariffs and Trade Policies Can Cause Price Escalations (Cont.)

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- Increase in material costs as an additional “tax” on imported materials.
- Cause pricing volatility that are not easy to predict due to changes in power.
- Delays in receipt of materials – delays in processing at ports.
- Supply chain impacts and lack of materials
  - Can impact the number of choices for material specifications for a project.



# Examples of Recent Disasters Causing Price Escalations

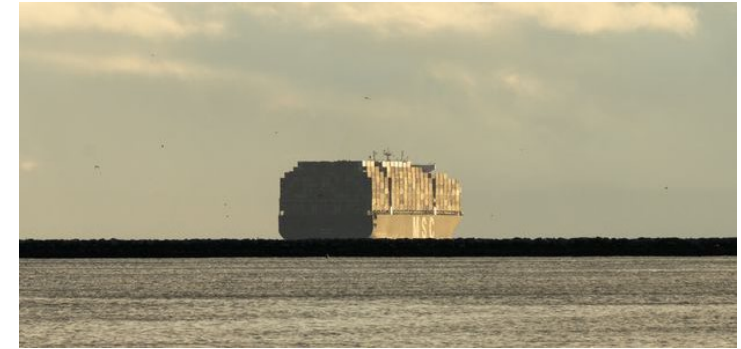
- Wildfires in the West
  - Burned nearly 5 million acres
- Suez Canal Crisis
  - “*Ever Given*” – blocked canal for 6 days
  - 369 ships were queuing to pass through
  - Stopped \$9.6 billion of trade from passing



# How the Pandemic Can Cause Price Escalations

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- Some factories that reduced production due to reduced demand in early 2020 are still not running at capacity;
- Ships not allowed in certain ports;
- Cargo handling has slowed as Covid-19 has depleted dockworker ranks;
  - 37 cargo ships from China were anchored off Southern California's coast at the beginning of February



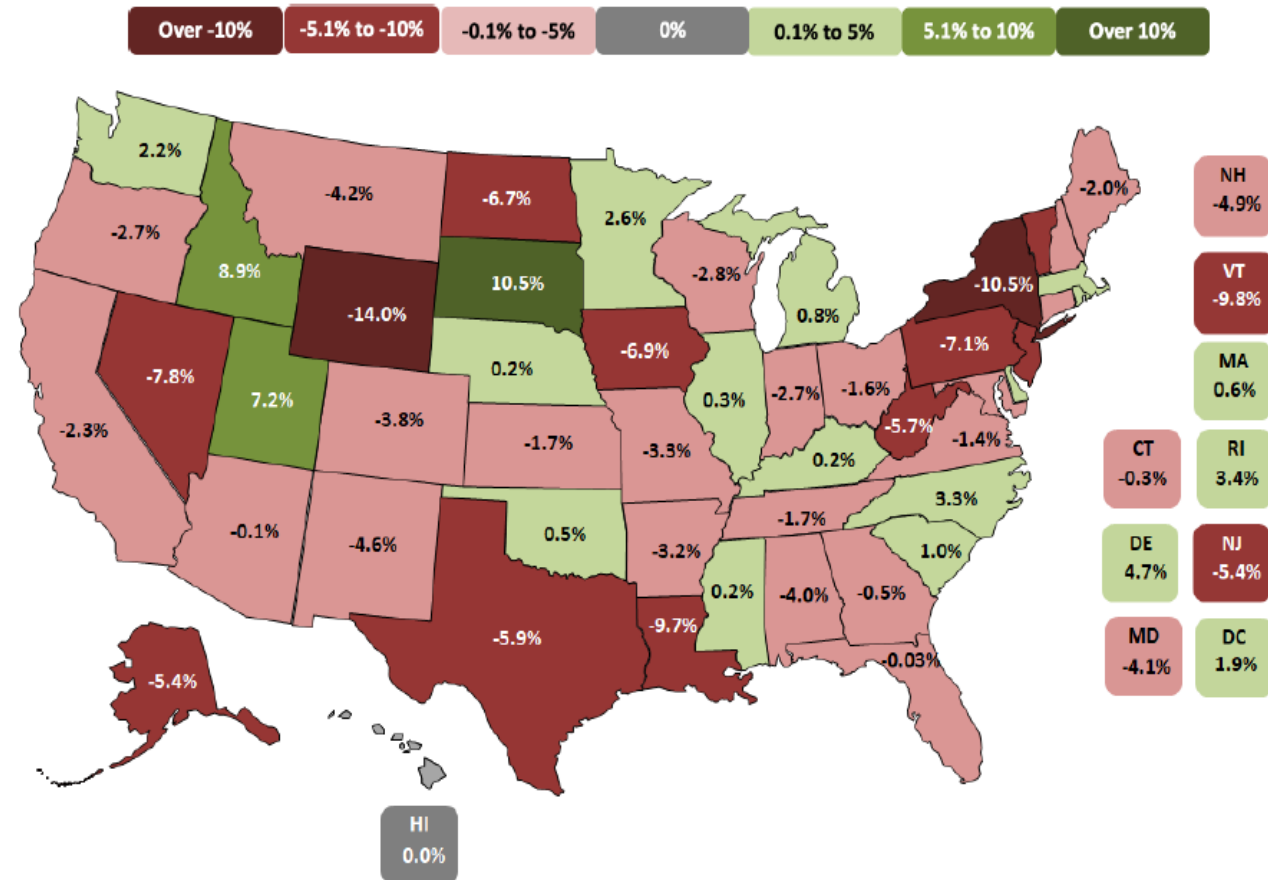
## State construction employment change, Feb. 2020–October 2021

16 states and DC **up**, 1 state **flat**, 33 states **down** (U.S.: -2.0%)



Top 5	
South Dakota	10.5%
Idaho	8.9%
Utah	7.2%
Delaware	4.7%
Rhode Island	3.4%

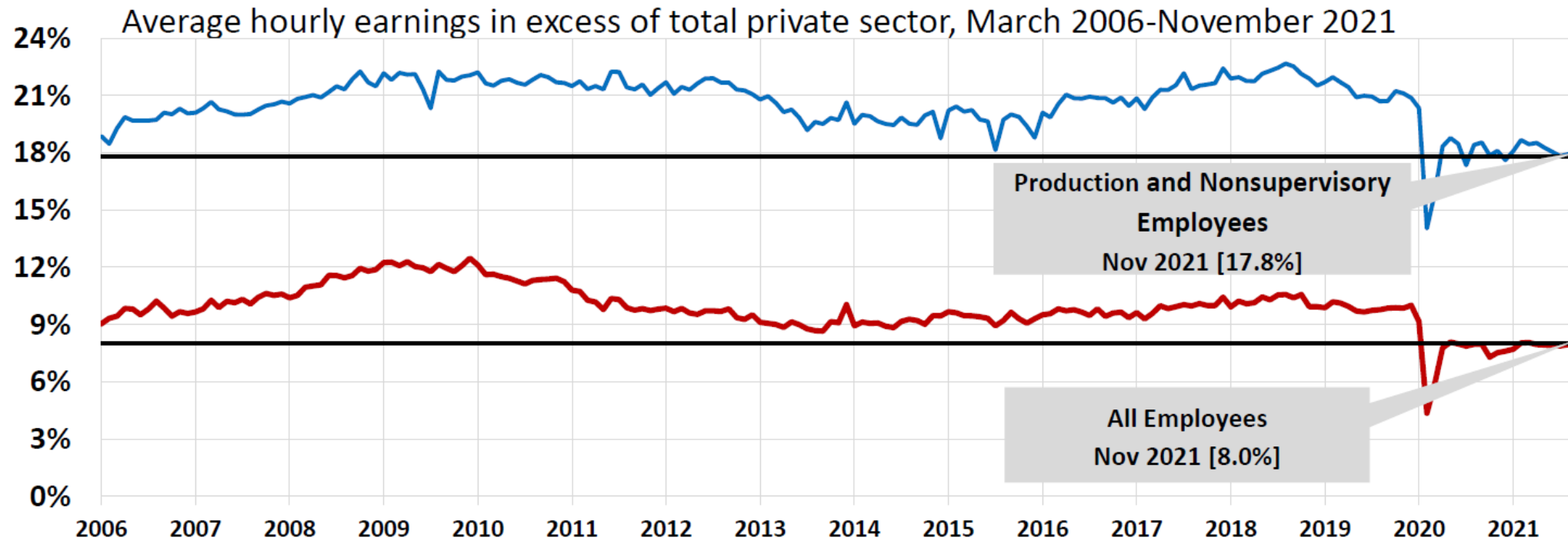
Bottom 5	
Wyoming	-14.0%
New York	-10.5%
Vermont	-9.8%
Louisiana	-9.7%
Nevada	-7.8%



## 2 concerns about construction worker supply



- Low vaccination rate: 57% for construction workers, 83% for other occupations
- “Premium” for construction wages relative to total private sector has shrunk
  - From 20-23% pre-pandemic to <18% for production & nonsupervisory employees
  - From 9-12% pre-pandemic to 8% for all employees



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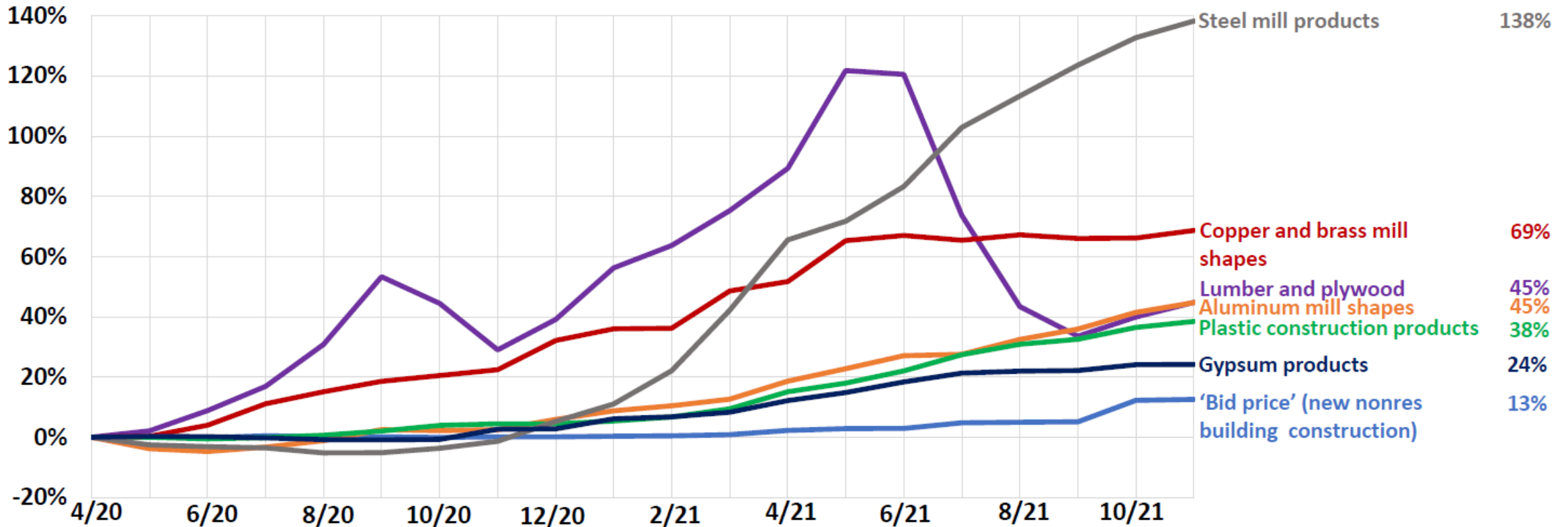
# PPIs for construction and selected inputs

cumulative change in PPIs, April 2020 – November 2021 (not seasonally adjusted)



**AGC**  
THE CONSTRUCTION  
ASSOCIATION

% change  
Apr 2020-  
Nov 2021:

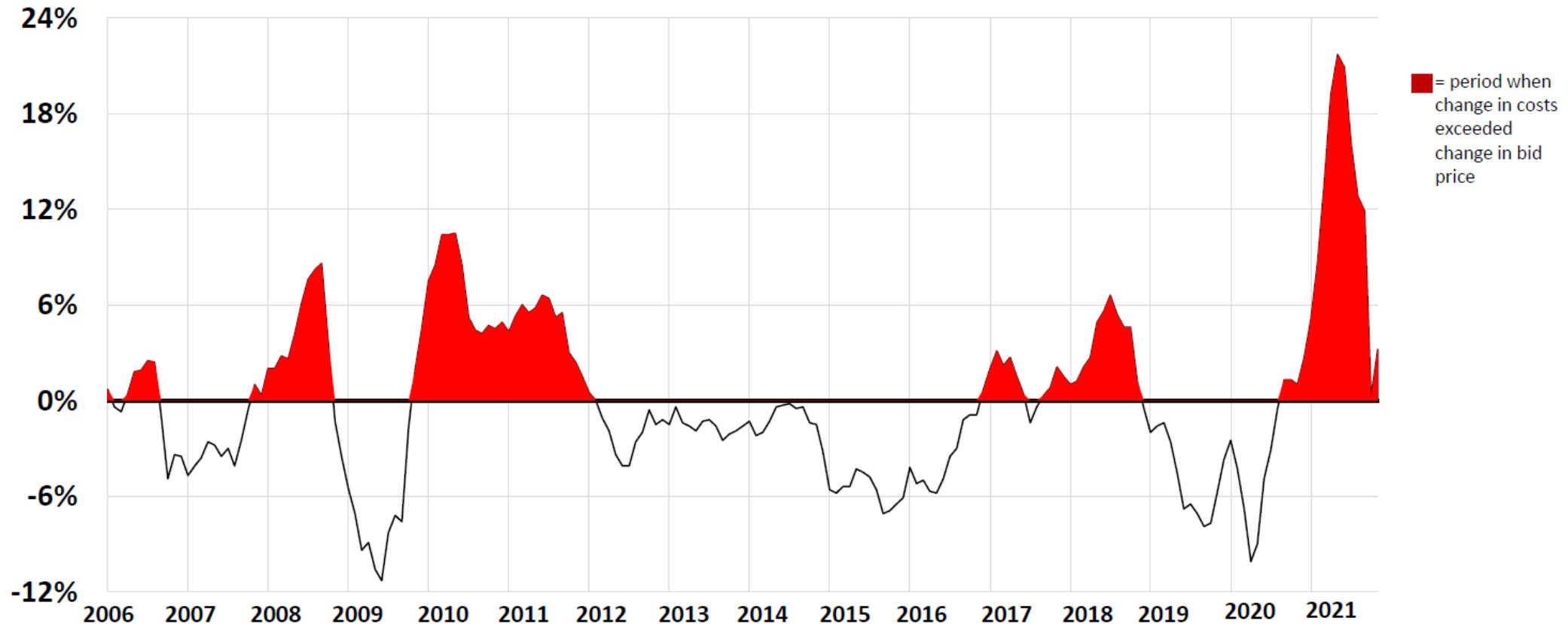


Source: Bureau of Labor Statistics, producer price indexes, [www.bls.gov/ppi](http://www.bls.gov/ppi)

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# Cost squeeze on contractors can last two years or more

Difference between year-over-year change in materials costs vs. bid prices, Jan 2006-Nov 2021



Source: Bureau of Labor Statistics, [www.bls.gov/ppi](http://www.bls.gov/ppi), producer price indexes for goods inputs to nonresidential construction (material costs) and new warehouse construction (bid prices)

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# How to Mitigate the Risk of Material Price Escalation

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- Risk Mitigation for Material Price Escalation can be done:
  1. At the time of bid;
  2. During the procurement phase;
  3. During contract negotiation – by including a Material Escalation Clause; or
  4. Existing Contracts





# How to Mitigate the Risk of Material Price Escalation – Time of Bid

- Cost Estimates:
  - Need to account for price escalation
    - Use a Cost Index such as the:
      - Building Cost Index (BCI);
      - Construction Cost Index (CCI); or,
      - Turner Cost Index (TCI)
- Note: some public owners may have their own in-house indices for use in bidding a project for that public owner, *if accounting for escalation is permitted at all.*



# How to Mitigate the Risk of Material Price Escalation – Time of Bid

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- Additional processes pre-bid:
  - Lock in material prices early with suppliers and shift the risk downstream
  - Include a generous bid contingency that accounts for potential escalation
  - Shorten the time duration that your bid will remain valid
  - Discuss with Owner use of alternate materials (with more consistent pricing)

# How to Mitigate the Risk of Material Price Escalation – Procurement Phase

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- Purchase materials with the most volatile prices as early as possible
- But Note:
  - Works best when Owner, Designer, and Contractors are on board and working cooperatively early in the project (Design Assist or IPD project delivery strategies)
    - Early material purchasing requires design to be complete/reliable early in the project to effectively mitigate risk
  - Consider the impact of any potential design changes
  - Remember to account for increased storage and handling costs

# How to Mitigate the Risk of Material Price Escalation – Procurement Phase

- Limit the suppliers' right to increase prices to the contractor's rights to increase prices to the owner.
- Alternatively, limit the suppliers' right to increase prices to a fixed amount, thereby capping the risk.



# How to Mitigate the Risk of Material Price Escalation - Contract

- The best method: Use a Cost Plus contracting method.
- In a typical stipulated/lump-sum contract the Subcontractor bears the risk of any financial impact arising from fluctuations in material prices.
  - If using a stipulated/lump-sum contract, include a material price escalation clause.



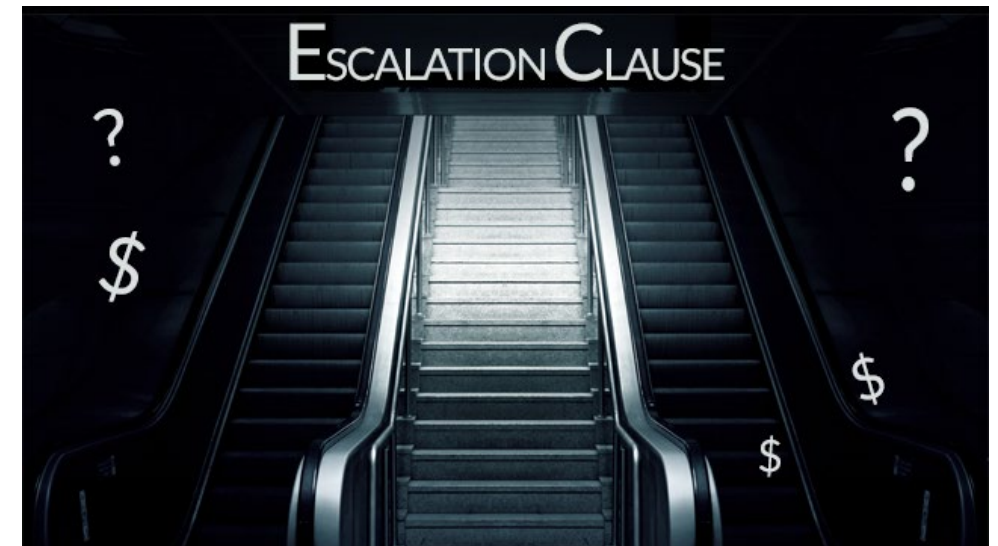
# Types of Material Escalation Clauses

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- “Day One” escalation clauses
- “Delay” escalation clauses
- “Threshold” escalation clauses

# Material Escalation Clauses

- Day One Escalation Clauses
  - A “day one” escalation clause requires the upstream party to pay for any increases in material costs once the contract is executed
  - The contract must define exactly what materials are subject to the clause, and must include baseline prices for those materials





# Material Escalation Clauses (Cont.)

- Delay Escalation Clause
  - A “delay” escalation clause holds a fixed price for a limited period of time, but allows the contractor to receive an equitable adjustment if the project is delayed or, more commonly, if it is not feasible to purchase all materials for the project at the start of construction.
  - Especially effective if contractor believes project may be delayed in its inception.



# Material Escalation Clauses (Cont.)

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- **Threshold Escalation Clause**

- A “threshold” escalation clause shares the risk by requiring the upstream party to pay for material price increases above a defined threshold
- The contractor is reimbursed only for significant price increases which occur between the bid (or contract date) and the date of installation or purchase of materials
- This type of clause shifts the risk of significant price increases to the upstream party, but vests the contractor with the risk of price increases up to the threshold level, effectively capping the contractor’s potential exposure

# Material Escalation Clauses (Cont.)

- **CDOT Contract Specifications:**
  - Allows for asphalt price adjustments for increases and decreases in the price of performance-graded binder component of HMA.
  - Allows for fuel price adjustments (triggered by a 5% difference between Fuel Base Price and Fuel Period Price).

## *2-636A.5 Liquid Asphalt Adjustment (dollars)*

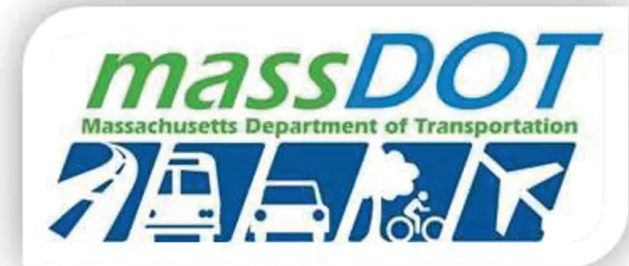
This adjustment is associated with the price of performance-graded binder component of HMA mixtures. The asphalt price adjustment will only be applied to HMA mixtures such as Class 1, 2 and 4, Superpave 0.375 in. (9.5mm), 0.5 in. (12.5mm) and 1.5 in. (37.5mm). The adjustment will be applied on a monthly or semi-monthly basis in accordance with the payment estimate schedule of the HMA pay items. Asphalt adjustment will be made upward or downward only when the asphalt period price varies more than \$5.00 from the asphalt base price. The Connecticut Department of Transportation will provide the Asphalt Price of the performance-graded binder. See Figure 2-6.30, Liquid Asphalt Adjustment Form.

# Material Escalation Clauses (Cont.)

<b>ASPHALT ADJUSTMENT</b> Item No. 0406999A (2/9/04 special provision)									
The asphalt price adjustments will be paid on a monthly or semi-monthly basis in accordance with the payment estimate schedule for bituminous concrete pay items.									
No adjustment will be made unless the difference between the posted Asphalt Base Price and Asphalt Period Price exceeds \$5.00.									
<b>Percentage of Performance-Graded Binder (PG%):</b>									
1): For HMA mixtures listed as Class 1, and Superpave 12.5mm (0.50 inch), the PG% applied = <b>5.0</b>									
2): For HMA mixtures listed as Class 2, and Superpave 9.5mm (0.375 inch), and Superpave 6.25mm (0.25 inch) the PG% = <b>6.0</b>									
3): For HMA mixtures listed as Classes 4 and Superpave 37.5mm (1.5 inch), the PG% = <b>4.0</b>									
<b>(HMA) : Hot Mix Asphalt</b> - The quantity (tons or metric tons) of accepted HMA measured for payment for the payment estimate period in which an adjustment applies.									
<b>(ABP) : Asphalt Base Price</b> - The average selling price per standard ton or metric ton, F.O.B., which is posted by the Department of Transportation and is in effect the Wednesday that is 28 days prior to actual bid opening.									
<b>(APP) : Asphalt Period Price</b> - The average selling price per standard ton or metric ton, F.O.B., which is posted by the Department of Transportation, and is in effect on the last day of payment estimate period in which the HMA mixture is subject to adjustment.									
Website INTRANET Address for Asphalt Base and Period Prices is at the following link: <a href="http://conndot/asphalt/asphalt.aspx">http://conndot/asphalt/asphalt.aspx</a>									
<b>Formula:</b> $HMA \times \{ (PG\%) / 100 \} \times (Asphalt\ Period\ Price - Asphalt\ Base\ Price) = \$$ _____									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">HMA</td> <td style="text-align: right; padding: 2px 5px;">0.00</td> </tr> <tr> <td style="padding: 2px 5px;">PG%</td> <td style="text-align: right; padding: 2px 5px;">0.0</td> </tr> <tr> <td style="padding: 2px 5px;">APP</td> <td style="text-align: right; padding: 2px 5px;">\$0.00</td> </tr> <tr> <td style="padding: 2px 5px;">ABP</td> <td style="text-align: right; padding: 2px 5px;">\$0.00</td> </tr> </table>	HMA	0.00	PG%	0.0	APP	\$0.00	ABP	\$0.00	<b>Prepared by :</b> <span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 150px; height: 20px;"></span>
HMA	0.00								
PG%	0.0								
APP	\$0.00								
ABP	\$0.00								
<b>Total Payment =</b>	<div style="display: flex; justify-content: space-between;"> <span>No Adjustment Necessary</span> <span>Paid on DWR : <span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span></span> </div>								


# Material Escalation Clauses (Cont.)

- **MassDOT Price Escalation Clauses:**
  - By statute, Contracts for road and bridge projects are required to include a price adjustment clause for fuel (diesel and gasoline), asphalt, concrete and steel.
  - Water and sewer projects must have a price adjustment clause for fuel (diesel and gasoline), liquid asphalt, and portland cement contained in cast-in-place concrete.
    - M.G.L. c. 30, sec. 38A





# Material Escalation Clauses (Cont.)

Massachusetts Department Of Transportation	 Massachusetts Department of Transportation Highway Division	Highway Division
Proposal No. XXXXXX-CCCC		
DOCUMENT 00813		
SPECIAL PROVISIONS		
PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL		
October 11, 2018		
<p>This special provision applies to all projects containing the use of structural steel and/or reinforcing steel as specified elsewhere in the Contract work. It applies to all structural steel and all reinforcing steel, as defined below, on the project. Compliance with this provision is mandatory, i.e., there are no "opt-in" or "opt-out" clauses. Price</p>		

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will be calculated by multiplying the number of pounds of unfabricated structural steel material or unfabricated reinforcing steel bars on a project by the index factor calculated as shown below under Example of a Period Price Calculation.

Price adjustments will not include guardrail panels or the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment shall not exceed the final shipping weight of the fabricated part by more than 10%.

# Material Escalation Clauses – Convincing a Reluctant Owner

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- Mutually Beneficial Material Escalation Clause
  - The GC/Owner bears the risk of price increases but also gets a corresponding reward if material prices drop
  - Usually take the form of a threshold escalation clause to avoid unnecessary forfeiture of the Contractor's margins





# Material Escalation Clauses – Convincing a Reluctant Owner

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- GCs/Owners may be reluctant to incorporate unilateral material escalation clauses
- Consider inclusion of a mutual or bilateral clause where each party stands to have some of the risk and some of the reward (consider ConsensusDocs Amendment 200.1)



# Prayer Phase:

## Shifting Material Price Increase in Existing Contracts

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- If there is no Material Price Escalation Clause, subcontractors may be able to find relief from material price escalation through existing contract provisions or equitable principles.
- Changes in Law Provisions
  - ConsensusDocs 200 §3.21.2 allows for an equitable adjustment for additional costs or time needed resulting from any change in law, including increased taxes, enacted after the date of the Agreement
- Force Majeure
- Mutual Mistake
- Commercial Impracticability

# Prayer Phase:

## Shifting Material Price Increase in Existing Contracts

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- Force majeure, mutual mistake and commercial impracticability arguments are difficult to make and win.
- Incorporation of a material escalation clause and proactive procurement provide the best opportunity to mitigate the risk of material price increases.

# Material Escalation Clauses – Form Documents

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- Contractors using the AIA standard fixed-price contract should be sure to modify the contract to appropriately allocate the risk of material price escalation
- The AIA documents have no materials escalation clause
- ConsensusDocs 200.1 Potentially Time and Price-Impacted Materials Amendment
  - Balanced document that carries the possibility that if prices fall, payment would also be decreased (§3.1)
  - Provides for caps on the amount of increase or decrease if mutually agreed by the parties (§3.3)

# Material Purchase Agreement Template

**MATERIAL PURCHASE AGREEMENT**

Date of Agreement: \_\_\_\_\_

Contractor: \_\_\_\_\_ ("Contractor")  
\_\_\_\_\_  
\_\_\_\_\_

Material Supplier: \_\_\_\_\_ ("Supplier")  
\_\_\_\_\_  
\_\_\_\_\_

Owner: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: \_\_\_\_\_

Supplier desires to supply materials to Contractor for the Project identified on the face of this Order. Therefore, the parties agree as follows:

**SUPPLIER'S ACCEPTANCE OF THIS MATERIAL PURCHASE AGREEMENT IS HEREBY MADE EXPRESSLY CONDITIONAL UPON ITS ASSENT TO AND ACCEPTANCE OF ALL TERMS AND CONDITIONS HEREIN. ANY ADDITIONAL OR DIFFERENT TERMS AND CONDITIONS PROPOSED BY SUPPLIER ARE EXPRESSLY REJECTED.**

**Section 1 – Pricing**

- 1.1 Pricing and additional terms and conditions are specified in **Exhibit A**. To the extent the terms and conditions specified herein vary from those in **Exhibit A**, the terms herein shall control. The Supplier's prices in **Exhibit A** shall not change during the duration of this Material Purchase Agreement ("Agreement"). Supplier shall not be entitled to any claim for damages or escalation resulting from delay, unless (1) Contractor is able to recover such damages on the Supplier's behalf from the Owner, or (2) the delay is caused solely by Contractor and the Supplier has provided sufficient evidence that the delay has caused an actual increase in costs.
- 1.2 All payments are directly contingent upon the receipt by the Contractor of payment from the entity with whom it contracted. Payment to Contractor by the entity with whom it contracted is a condition precedent to any payment being due to the Supplier. Contractor shall have no obligation to make payment unless Supplier provides all applicable certificates of compliance, test results, samples, insurance, certified payroll, or any other paperwork or submissions as required by the Owner or other tier above Contractor. Payment will be net 30 days.
- 1.3 Contractor reserves the right, at any time, to make written changes to the specifications, drawings, or plans relating to this Agreement or the time and place of delivery and, if necessary, shall make suitable adjustments in the price and/or in the time for performance or delivery under this Agreement.
- 1.4 Supplier shall pay all governmental taxes, tariffs and/or other charges that Contractor may be required to pay with respect to the production, sale and transportation of any material or equipment provided hereunder, except those taxes, tariffs and/or other charges which are specifically noted on the face hereof.



# What is this document?

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- An MPA is the written agreement between YOU (the “Contractor”) and the material supplier (the “Supplier”).
- Legal, Binding, Enforceable.
- Should Identify the BUSINESS DEAL:
  - Scope
  - Price
  - Delivery
  - Warranty
  - Other Rights, Duties, and Obligations

# Why do we need this document?

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- The contract is the primary risk management tool in any business deal.
- The MPA identifies the essential terms of the business deal AND allocates risks to the party best able to handle them.
- Your MPA template should be “Contractor-friendly”
  - Not always in a position of negotiating “power”
  - Specialty products or materials (elevators)



# Risk Allocation in an MPA

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- What happens if delivery is delayed?
- Who pays for shipping?
- What if the Owner doesn't pay me?
- What if I have concerns about the manufacturing process?
- What happens if I get sued because of a product issue?
  - A well-crafted MPA addresses these risks, *and more!*

# Key Features of an Effective MPA

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- No material price escalation (unless there is a flow-down right upstream)
- “Pay if paid” provision
- Contractor may access supplier’s facilities (critical right in a time of economic uncertainty)
- Ability to terminate Supplier and hold them responsible for delays/cost increases
- Clear packaging/shipping terms

# Key Features

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- Supplier's warranty matches the Contract Documents.
- In the event of a dispute, Supplier must supply materials under protest.
- Broad ability to terminate with minimal financial exposure.
- Contractor decides whether to use Arbitration or Litigation in the event of a dispute.
- Broad indemnification by Supplier.

# The Disclaimer...

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ONE SIZE DOES  
NOT FIT ALL

- Few will sign a well-crafted an contractor-friendly MPA “as written”.
- Revise the MPA to suit your needs.



# QUESTIONS?

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# Speakers



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A background image of a construction site with workers on a building frame, overlaid with a teal geometric shape in the top left.

# THANK YOU!

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