

**SUBJECT 2**

**Re:** Scaffolds, Scaffolding, or Scaffold Sections or Components

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**Proponent:** Commodity Classification Standards Board

**Present Classification Provisions**

Item	Description	Class
33460	<b>Builders' or Maintenance Horses, Scaffolds, Scaffolding or Scaffold Sections:</b>	
33500	Aluminum or aluminum and wood combined, KD flat, or in panel or board-like form .....	100
33520	Steel or steel and wood combined, NOI:	
Sub 1	SU, not nested nor interlaced, loose or in packages .....	150
Sub 2	SU, interlaced or nested, or KD, loose or in packages .....	100
Sub 3	KD flat, or in panel or board-like form, loose or in packages.....	70
33530	Window cleaners', KD flat, or in panels or board-like form, NOI, in packages.....	85
33540	Wooden, NOI:	
Sub 1	SU .....	200
Sub 2	KD flat, or in panel or board-like form .....	70
	<b>HARDWARE GROUP: subject to item 92900</b>	
93620	<b>Brackets</b> , scaffold, iron .....	70
172521	<b>Scaffolding, or Scaffold Components</b> , tube and clamp type, unassembled, steel, see Note, item 172522, <b>viz.:</b> <b>Bearer Trusses;</b> <b>Braces;</b> <b>Brackets;</b> <b>Casters;</b> <b>Clamps;</b> <b>Collars;</b> <b>Posts;</b> <b>Screw Jacks;</b> <b>Starter Collars;</b> In packages .....	55
172522	NOTE—Applies on shipments consisting of components necessary to erect a scaffold or scaffold section or on shipments consisting of one or more of the named scaffold components.	

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**Proposed Classification Provisions**

Item	Description	Class
33460	<b>Builders' or Maintenance Horses, Scaffolds, Scaffolding or Scaffold Sections:</b> .....	⇒Cancel; see item 172521
33500	Aluminum or aluminum and wood combined, etc .....	⇒Cancel; see item 172521
33520	Steel or steel and wood combined, NOI, etc .....	⇒Cancel; see item 172521
33530	Window cleaners', etc.....	⇒Cancel; see item 172521
33540	Wooden, NOI, etc. ....	⇒Cancel; see item 172521
<b>HARDWARE GROUP:</b> subject to item 92900		
93620	<b>Brackets</b> , scaffold, iron .....	⇒Cancel; see item 172521
⇒172521	<b>Scaffolding or Scaffolds, or Components or Parts thereof, viz.:</b> <b>Builders' or Maintenance Horses;</b> <b>Scaffolding or Scaffold Components or Parts, NOI;</b> <b>Scaffolding or Scaffolds, NOI;</b> <b>Scaffolding or Scaffolds, window cleaners';</b> In packages:	
Sub 1	Greatest dimension exceeding 192 inches, see Note, item NEW, subject to Item 170 and having a density in pounds per cubic foot of:	
Sub 2	Less than 15 .....	200
Sub 3	15 or greater.....	100
Sub 4	Greatest dimension exceeding 96 inches but not exceeding 192 inches, see Note, item NEW, subject to Item 170 and having a density in pounds per cubic foot of:	
Sub 5	Less than 15 .....	150
Sub 6	15 or greater.....	85
Sub 7	Greatest dimension not exceeding 96 inches, see Note, item NEW, subject to Item 170 and having a density in pounds per cubic foot of:	
Sub 8	Less than 15 .....	110
Sub 9	15 or greater.....	70
172522	NOTE—⇒Cancel; no further application.	
⇒NEW	NOTE—Greatest dimension refers to the longest straight-line dimension of the handling unit as tendered for shipment.	

**SUBJECT 2****Analysis****Research Project 1208**

Research Project 1208 on scaffolds, scaffolding, or scaffold sections or components was initiated in October 2013 to address interpretation issues and to determine the transportation characteristics of the involved products. Hereinafter, these products will be referred to as "scaffolding."

In conjunction with the project, questionnaires were mailed to 173 potential manufacturers or shippers of the involved products and 18 associations believed to represent those manufacturers or shippers in October 2013, and for those that did not respond, again in January 2014. Of the companies contacted, 21 responded that they do not manufacture or ship scaffolding, and 11 companies provided at least some information. Six associations indicated that they do not represent manufacturers or shippers of this product. No responses were received from the remaining associations.

**History of Provisions**

The basic provisions for steel scaffolding, wooden scaffolding, window cleaners' scaffolding and iron scaffold brackets were all adopted from the rails in 1936. The provisions for window cleaners' scaffolding and iron scaffold brackets have remained substantially unchanged to the present. The present classes for wooden scaffolding are the result of action taken on Special Docket No. 1 (issued July 20, 1949) to remain rail competitive. First appearing in NMFC A-1, effective July 10, 1952, the provisions have remained substantially unchanged to the present.

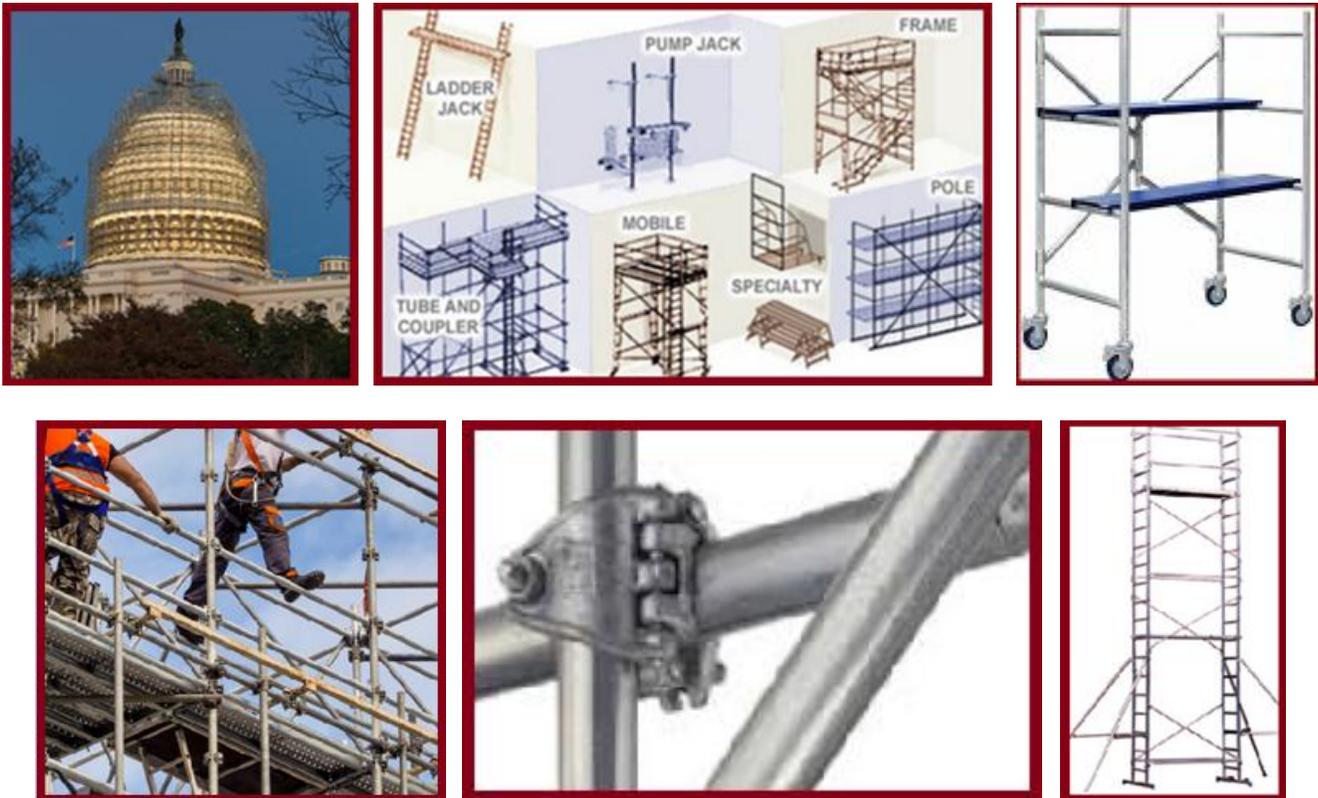
As a result of action taken on Special Docket No. 2 (issued April 27, 1951) and Special Docket No. 3 (issued March 15, 1952), provisions for aluminum or aluminum and wood combined scaffolding were established to remain competitive with the rails, first appearing in NMFC A-1, effective July 10, 1952, and remaining substantially unchanged to the present. The current provisions for steel or steel and wood combined scaffolding, NOI, were established as a result of action taken on Docket 66, Subject 4 (November 1954) and first appeared in Supplement 8 to NMFC A-2, effective March 8, 1955.

Item 172521 was established as a result of action taken on Docket 843, Subject 18 (April 1984), which was a proposal to establish specific provisions for tube and clamp type, unassembled, steel scaffolding or scaffold components. Information from that record indicated densities ranging from 31.80 to 77.90 pcf, with an average density of 41.80 pcf. An average value of \$1.33 per pound (in 1984 dollars) was reported. That proposal was approved as modified, and the changes first appeared in Supplement 11 to NMF 100-K, effective November 3, 1984. The provisions have remained substantially unchanged to the present.

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## About Scaffolding

Scaffolding refers to a temporary structure used to support people and material in the construction, repair or maintenance of buildings and other large structures. It is usually a modular system of components which may include metal pipes or tubes and flooring material. The material composition and design, as well as the components, can vary depending on their specific application. Scaffolding is available in a wide variety of dimensions as depicted in the examples below.

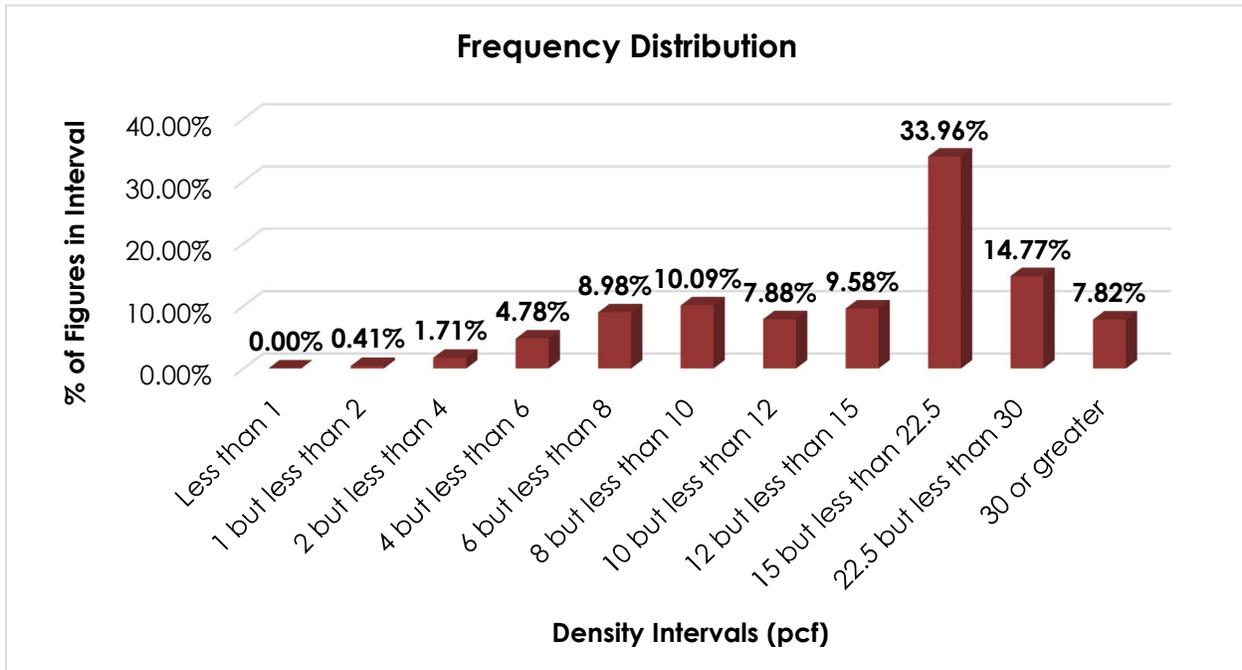


## Transportation Characteristics

**Density**—The information of record includes 8,515 density observations submitted by shippers and carriers, observed on CCSB dock surveys and obtained from the CCSB's Density Study<sup>1</sup>. The products range in density from 1.00 to 134.33 pcf, with an average density of 16.89 pcf. The frequency distribution is shown on the following page.

<sup>1</sup> The Density Study is part of an ongoing effort by the CCSB to collect information on actual shipments; it is not tied to any particular research project, nor does it target any particular product category. Carriers that choose to participate in the study periodically submit shipment data captured through their respective freight auditing programs. The data is identified by NMFC item, and only verifiable data points, which include the weight and the dimensions and/or cube of the shipping unit involved, are used.

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When the data is evaluated on the basis of a density break at 15 pcf, the following ranges and averages are calculated.

Density Group (pcf)	Density Range (pcf)	Average Density (pcf)
Less than 15	1.00 – 14.99	9.17
15 or greater	15.00 – 134.33	22.83

**Handling**—Scaffolding is generally tendered uncovered or unprotected for shipment secured on lift truck skids or pallets with standing posts. Less commonly, scaffolding may be shipped in boxes secured to lift truck skids or pallets. Regardless of how they may or may not be packaged, the articles frequently overhang the lift truck skid or pallet, making handling more difficult. Packages may also be labeled with precautionary markings or handling instructions such as “Fragile” and “Handle with Care.”



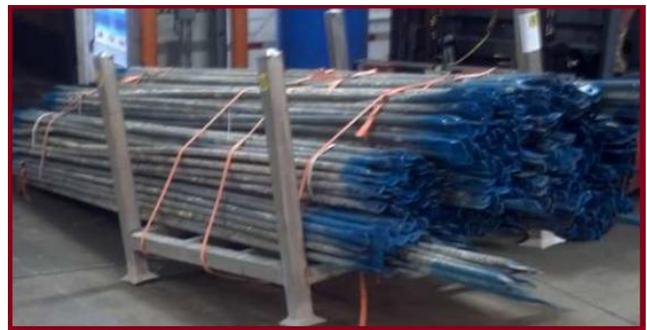
Scaffolding comes in a multitude of sizes and configurations. It is not uncommon for handling units to exhibit lengths over 96 inches<sup>2</sup>, and lengths have been recorded up to 396 inches (33 feet). In such instances, safely handling units into and out of the vehicle becomes increasingly more difficult, and certain equipment, such as fork extensions, or additional personnel may be necessary to avoid damage to the scaffolding or other freight due to the presence of exposed or protruding edges. The level of difficulty increases as the length/size of the article increases, even if fork extensions are available and used. Often there is not enough room at carrier facilities to safely or easily handle and maneuver excessively long units.

<sup>2</sup> Item (Rule) 568 for Heavy or Bulky Freight—Loading or Unloading employs the threshold limit of exceeding 8 feet (96 inches) in greatest dimension as the measurement at which freight becomes more difficult to load and unload when compared to general freight.

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**Stowability**—Several negative stowing considerations have been identified. The lift truck skids or pallets are frequently not long enough to support the entire product, and having some degree of overhang is ordinary. Additionally, the handling units typically do not provide a flat load-bearing surface for top freight. A carrier described the commodity as, “too awkward [and] heavy to put on other freight.” Furthermore, the presence of protruding edges inhibits the carrier’s ability to safely load freight adjacent to the scaffolding. Excessively long handling units may further complicate the carrier’s ability to structure a load and maximize vehicle utilization. Depending on the length/size of the article, the carrier will have to ensure that the freight will fit in the vehicle.



**Liability**—Scaffolding is not perishable, hazardous in nature, or unusually susceptible to theft. Scaffolding tendered secured on lift truck skids or pallets with little or no protective packaging may have exposed edges or protrusions that can puncture, mar or otherwise damage adjacent freight, and it may also be susceptible to damage. One carrier indicated, “when arriving at the consignee, often the scaffolding pieces are refused and returned to the shipper. We end up eating the cost of the commodity in a claim and selling the pieces for pennies on the dollar in salvage,” while another carrier stated that the commodity is “easily bent/damaged.” The photo on the right, which was taken on a CCSB dock survey, shows a shipment of scaffolding piercing the packaging of adjacent freight.



With respect to claims, claims ratios of 1.14% and 3.76% for two shippers have been reported. Although not necessarily indicative of a claims problem, another report indicated delivery exception rates of 6.66% and 9.09% for items 33500 and 172521, respectively. Shippers who returned commodity questionnaires reported zero to 24 claims annually. The value per pound ranges from \$1.06 to \$10.13, with an average value of \$4.19 per pound.

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### Relationship to CCSB Policies and Guidelines

CCSB policy calls for provisions to be as clear as possible to mitigate the potential for interpretation disputes. CCSB policy also calls for combining descriptions embracing related commodities and creating uniformity in provisions addressing the same or similar circumstances.

The present provisions for scaffolding based on material consist, form of shipment, and type have been the source of interpretation issues. In keeping with CCSB policy, these issues would be mitigated by canceling the provisions of items 33460, 33500, 33520, 33530, 33540 and 93620 with reference to item 172521, while concurrently revising the listings in the "viz." format for simplification and uniformity.

CCSB policy also calls for provisions to reflect a commodity's known transportation characteristics. Information of record for scaffolding shows a range in density from 1.00 to 134.33 pcf, with an average density of 16.89 pcf. Under CCSB guidelines, an average density of 16.89 pcf is generally associated with class 70, which calls for a minimum average density of 15 pcf. However, when commodities exhibit a wide range of densities, which are not accurately represented by a single class, CCSB policies state that density-based provisions may be established.

In this instance, research has identified several negative handling, stowability and liability issues that must also be considered, in accordance with CCSB policies. These factors have been detailed in this analysis and include the increased care and attention needed to safely handle these products, the inability of the scaffolding to provide a flat load-bearing surface for top freight or to allow the carrier to safely load freight adjacent to it, and an increased susceptibility to damage. Additionally, as the greatest dimension of the handling unit increases, the scaffolding has been found to be increasingly more difficult to handle and stow, and the liability may be greater.

Accordingly, this proposal would establish classes predicated on a density break at 15 pcf<sup>3</sup>. Based on the identified handling, stowing and liability concerns, which are amplified as the handling unit's greatest dimension increases, assigning classes higher than those provided by the CCSB density guidelines would be consistent with CCSB policy. This proposal would establish provisions for scaffolding with respective class adjustments for handling units not exceeding 96 inches, exceeding 96 inches but not exceeding 192 inches, and exceeding 192 inches in greatest dimension.

The associated average densities, guideline classes and proposed classes are depicted in the table on the following page.

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<sup>3</sup> The density provisions would include reference to Item (Rule) 170, the inadvertence clause.

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Density Group (pcf)	Average Density in Group (pcf)	Guideline Class	Class Adjustment for Articles Not Exceeding 96 Inches	Class Adjustment for Articles Exceeding 96 Inches but Not Exceeding 192 Inches	Class Adjustment for Articles Exceeding 192 Inches
Less than 15	9.17	100	110	150	200
15 or greater	22.83	65	70	85	100

Concurrently, Note, item 172522 would be canceled with no further application, while a new, attendant Note to be referenced by item 172521 would be established to define the term "greatest dimension," in the interest of clarification.

This proposal is consistent with classification precedent. As a result of action taken on Docket 2011-2, Subject 3 (May 2011), item 52190, naming iron or steel pipe or tubing, was established to provide classes based on the greatest dimension of the handling unit as tendered for shipment, with a corresponding class adjustment for each eight-foot incremental increase, and a density break where greatest dimension does not exceed 96 inches. That proposal was approved as docketed, and the provisions first appeared in Supplement 2 to NMF 100-AK, effective July 23, 2011.

Additional precedent can be found in Docket 2013-3, Subject 1 (September 2013). As a result of that proposal, item 86700, naming flat glass, bent or not bent, NOI, was amended to provide classes based on the greatest dimension and density of the handling unit as tendered for shipment. Due to the respective negative handling, stowing and liability characteristics, class adjustments were given to articles with greatest dimension not exceeding 96 inches and articles with greatest dimension exceeding 96 inches, accordingly. That proposal was approved as docketed, and the provisions first appeared in Supplement 4 to NMF 100-AM, effective December 14, 2013.

Based on the information of record, this proposal, as docketed, is in keeping with CCSB policy and precedent.