
# Hardlines

## Data Attributes

## Lumber Products

## Implementation Guideline

**Version 1.0**

**Last Revised December 1, 2005**

# Introduction:

This document is intended to support trading partner data synchronization efforts for trading partners who supply dimensional lumber, studs, furring strips, boards, project panels, fencing, fencing panels and moldings to retailers.

The format for the document is to:

- Identify the trade item data attribute
- Provide its definition as determined by the VICS Hardlines Data Sync Subcommittee in conjunction with schema definitions
- Share implementation best practices where applicable
- Answer specific questions received from manufacturers on how to implement a given attribute

The goal of this document is to:

- Clarify the use of specific data attributes
- Eliminate the need for trading partner specific implementation guidelines
- Identify values that retailers may require in each field

To that end, the VICS Hardlines Implementation Subcommittee arranged a discussion with representation from the Lumber manufacturers, VICS members, Retailers and data pool service providers so that agreement could be reached for a consistent response to these questions. The output of that discussion is this document that provides specific implementation guidelines.

# Retailer Input and Review:

Lowe's (Mae Kemp) reviewed this document and provided input during a conference call on September 2, 2004.

The Home Depot (Monica Ireland and Jessica Brown) reviewed this document and provided input on December 7, 2004. In almost all cases they agreed with the suggestions from Lowe's.

Their combined suggestions have been incorporated into this document. There are several areas noted that are still being evaluated by the retailers. The retailers will be asked to complete a review of the final draft and provide input to the changes prior to submittal to the VICS E-Collaborative Commerce Steering Committee for approval..

## Manufacturer, Data Pool, and Standards Participants:

The following individuals participated in the VICS Lumber Subcommittee Task Force to address the attributes identified in this document.

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|---|---|
| Walter Cole | Boise Distribution |
| Heather Murray | Sauder |
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## Product Dimensional Attributes

Package measurement standards for Depth, Width and Height have not previously been clearly understood for many panelized or lumber products. The following section provides basic information to support the correct determination of dimensional attributes, and provides references to additional material that more fully describes the process and exceptions to the general rules.

In order to obtain accurate dimensional attributes, it is critical to reference and follow the EAN.UCC Package Measurement Rules for Data Alignment. (Section 6.8 of the General EAN.UCC Specifications) The package measurement rules provide for a consistent and standardized methodology for measuring dimensions of trade items. Additional information is contained in the GS1 US Package Measurement Guidelines that further explain and illustrate the processes used to correctly obtain dimensional attributes.

**Note: The methods to obtain dimensional attributes are based on reference surfaces that are different based on whether or not a trade item is intended to pass through point-of-sale.**

- Consumer Trade Items **are** intended to pass through point of sale
- Non-Consumer Trade Items **are not** intended to pass through point of sale

**The reference surfaces are defined as follows:**

- Consumer Trade Items - Utilize the "Default Front" which is defined as the side with the largest surface area that carries the brand or product name intended to "sell" the product to the consumer. See Figure 1 on next page for a visual example.

- Non-Consumer Trade Items – Utilize the "Natural Base" which is defined as the bottom or natural underside. Finding the natural base can be aided by observing the printing on the trade item, such as branding, "Top", or "This Side Up". See Figure 1 on next page for a visual example.

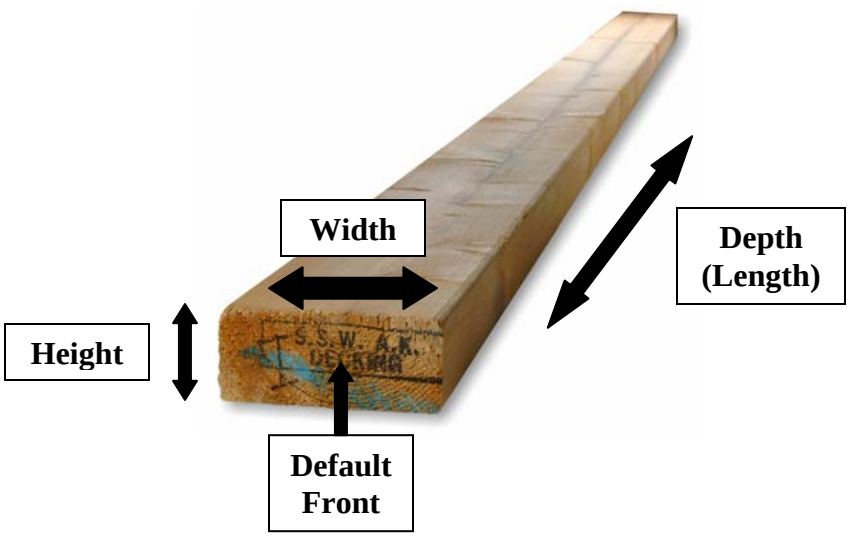


**Figure 1 - Typical Consumer Trade Item**

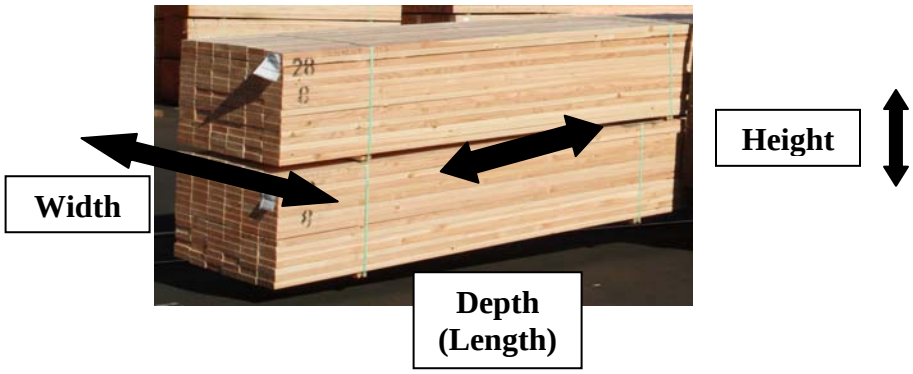


**Figure 2 - Typical Non-Consumer Trade Item**

**Depth**

Description:

- For **Consumer Trade Items**, depth is defined as the measurement from front to back while facing the default front.
- For **Non-Consumer Trade Items**, depth is defined as the longest side of the Natural Base.

Reference and follow EAN.UCC package Measurement Rules for Data Alignment. (Section 6.8 of the General EAN.UCC Specifications) The package measurement rules provide for a consistent and standardized methodology for measuring dimensions of a trade item, and are based on a reference surface as further described in the general specifications. Also reference GS1 US Package Measurement Guidelines that further illustrate how to correctly obtain dimensional attributes for both types of trade items.

**Implementation Note:** When height, width and depth are populated, the UOM must match on all of the attributes (e.g. inches). Change to the depth of an item cannot be more than 20% of the original value.

Question: Panelized Products suggested that Depth equal the traditional length of the product. Do the retailers want us to follow this guideline?

Answer:

For **Consumer Trade Items**, depth is defined as the measurement from front to back while facing the default front.

For **Non-Consumer Trade Items**, depth is defined as the longest side of the Natural Base. This is equivalent to the traditional term of length.

**Height**

Description:

- For **Consumer Trade Items**, height is defined as the measurement from the bottom most point to the top most point while facing the Default Front.
- For **Non-Consumer Trade Items**, height is defined as the measurement from the bottom most point to the top most point of the Natural base.

**Implementation Note:** When height, width and depth are populated, the UOM must match on all of the attributes (e.g. inches). Change to the height of an item cannot be more than 20% of the original value.

**Implementation Note:** When considering palletized GTINs, the height of the pallet **IS NOT INCLUDED** in the measurement.

**Implementation Note:** Standards are currently in the development process which would specify both the unit load and the delivery platform in order for trading partners to communicate the total height of a logistics unit.

Question: The definition states that the height of the packaging and/or pallet is included in this measurement. Do we agree to include the pallet and dunnage?

Answer: The GDSN Guideline Group and the GDSN Task Group are in agreement that the pallet base is **NOT** included. **Only** if spacers are **always** included as an **integral** part of the banded unit load, would the height include the spacers.

Question – Lumber products are typically described in nominal terms, but their actual dimensions are frequently less. Which value should we use in the dimension fields?

Answer: Actual dimensions should be placed in measurement fields at all levels of the product hierarchy. The nominal terms can be included in the Additional Trade Item Description or Short Description attributes.

## Width

Description:

- For **Consumer Trade Items**, width is defined as the measurement from left to right while facing the Default Front.
- For **Non-Consumer Trade Items**, width is defined as the shortest side of the Natural Base.

**Implementation Note:** When height, width and depth are populated, the UOM must match on all of the attributes (e.g. inches). Change to the width of an item cannot be more than 20% of the original value.

Question: How is this width determined for lumber products? The standards seem to contradict themselves on consumer units' verses non-consumer units.

Answer: The Package Measurement Rules define two methods for obtaining dimensional attributes based on whether a trade item is a consumer trade item or a non-consumer trade item.

Question – Lumber products are typically described in nominal terms, but their actual dimensions are frequently less. Which value should we use in the dimension fields?

Answer: Actual dimensions should be placed in measurement fields at all levels of the product hierarchy. The nominal terms can be included in the Additional Trade Item Description or Short Description attributes.

# Additional Hardlines Data Attributes:

## Additional Trade Item Description

Description: This field may be used to supply additional trade item information in order to more properly or completely describe trade item characteristics.

**Implementation Note:** Although the schema allows for 1,000 characters, the committee recommends no more than 225 characters be transmitted.

Hardlines Best Practice Recommendation: This should be a long description that allows the manufacturer to give the retailers additional information about the item. The retailers will manipulate the description, as needed for their marketing pieces and shelf tags.

## Brand Name

Description: The name used by a brand owner to uniquely identify a line of trade items or services.

Question: Will the retailers provide a GTIN for private label products like Top Choice (Lowe's) and Millstead (The Home Depot)?

Answer: Hardlines Retailers do not at this time provide manufacturers with UPC and GTIN data for their private label products. Work continues in the GDSN Task Groups to determine how to handle the private label issues.

## Brand Owner

Description: Unique location number (GLN) that identifies the brand owner.

**Implementation Note:** May or may not be the same entity as the information provider, who actually enters and maintains data in Data Pools. Most commonly, the brand owner is also the information provider, but this is not always the case. Private Label, Brokered & Licensed Items are common examples where the Brand Owner may be different.

Question: Will the retailers provide GLN for private label products like Top Choice (Lowe's) and Millstead (The Home Depot) or should we use our GLN?

Answer: The Brand Owner GLN will typically be the GLN of the retailer for private label products.

Question: Stocking distributors sell product from many different companies under the same GTIN. For example, a distributor may carry 2x4-96" studs from 5 different mills and sell them under the same GTIN (UPC). Who is the brand owner? Is the distributor required to create separate GTINs for each item?

Answer: Retailer is brand owner for private label and may determine how the GTINs are created based on whether or not there is a unique brand relationship between the trading partners. Stocking distributors will typically use their own GLN if they are selling a "generic" product.

**Class of Dangerous Goods**

Description:
This attribute is dependent upon attribute Dangerous Goods Indicator being set to Y. This is one of the 9 attributes that would be required if set to 'y'.

Question: Are products in Lumber (anything made with wood) such as pressure treated considered dangerous for this attribute?

Answer: This attribute applies to U.S. Department of Transportation classifications. At this time, no lumber products are considered hazardous for transportation purposes. None of the other hazardous goods attributes will be entered. Set indicator to 'no'.

**Country of Origin**

Description: The country code or codes in which the goods have been produced or manufactured.
Examples: 124 = Canada 484=Mexico 840 = United States

**Implementation Note:** This is a repeatable field. If the product is manufactured in more than one country, all countries should be listed.

Question: How do we record information for products that have the same GTIN but are manufactured in different countries? For example: We manufacture lumber in the US and Canada and ship orders to customers in the US and Canada from any mill. If we ship from our Canadian mill to locations inside the US do we need to fill in the codes for the US and Canada?

Answer: This attribute helps the retailers determine how much of a product they are importing. This attribute is referring to product final assembly. When available, list the countries in priority order based on the percentage of product manufactured from highest to lowest. See comments on Harmonized Tariff Code. If there are multiple countries of origin or the product may be imported across an international border, the Harmonized Tariff Code will be provided.

**Description Short**

Description: 30 character description that is used as the primary item description in the retailer's system.
**Implementation Note:** Some Hardlines retailer's systems may truncate this field.
Question: Is there a standardized format for this data?

Answer: This field should be populated with a free form short length description of the trade item that can be used to identify the trade item at point of sale. Cryptic abbreviations should be avoided. This description should be recognizable to any reader. Retailers will use data from other fields to create shelf tags.

Hardlines Best Practice: when creating descriptions for dimensional products, begin the description with the measurements. Example- 2X4X8 Kiln Dried Douglas Fir

## Global Trade Identification Number

Description: A globally unique numerical value used to uniquely identify a trade item.

Question: Manufacturers of both private label and commodity products sometimes end-tag the product with the same GTIN, for instance: Lowe's Top Choice 2x2x8 UPC-A (end tag) is 0546112345c. Georgia-Pacific Treated Lumber 2x2x8 UPC-A (end tag) is 0546112345c. They are the same product with the same GTIN but they have different label descriptions based on who ordered it. Other manufacturers may assign the products separate GTINs.

Answer: In the example above, there are two different brands with the same GTIN. **The standard requires these products have two different UPC-A's and two unique GTINs**.

## Gross Weight

Description: Used to identify the gross weight of the trade item. The gross weight includes all packaging materials of the trade item. At pallet level the trade item Gross Weight includes the weight of the pallet itself.

**Implementation Note:** Gross weight required on Orderable Units only. If gross weight and net weight are provided on the same record, gross weight must be greater than or equal to net weight, and the UOM must match (e.g. pounds). Change to the gross weight cannot be more than 20% of the original value.

Question: Per the description is it true that the weight of the packaging and/or pallet is included in this measurement?

Answer: The gross weight of the shipping unit will contain the average weight of the dunnage or pallet. The net weight of the shipping unit will exclude the weight of the dunnage or pallet.

Question: Lumber product weights will vary from run to run, from plant to plant and from season to season. How should we state the weight of the product? How will the retailers use this information? Will they feed this information into their systems to determine truckload quantities?

Answer: Lumber products will use the average weight of the specific products. The individual product **will not** include a prorated portion of the weight of the dunnage.

Question: Green lumber may vary by more than 20% from the annual average from season to season, how we want to handle it?

Answer: Use an average that is calculated to ensure the weight never exceeds 20% higher throughout the seasons.

## Harmonized Tariff System Identification Code

Description: All of the imports and export codes used by the United State are based on the Harmonized Tariff System (HTS). The HTS assigns 6-digit codes for general categories. Countries that use the HTS are allowed to define commodities at a more detailed level than 6-digits, but all definitions must be within that 6-digit framework.

Question: US manufacturer sources a product from Canada that is shipped direct to the retailer. Is this a harmonized situation? The same product is sourced in Canada and shipped to a manufacturer owned distribution center for later distribution to any retailer. Is this a harmonized situation? In general, how will a retailer use this attribute?

Answer: If the Country of Origin code contains more than one country or if the product is shipped across an international border, then the harmonized tariff code is required.

## Is Trade Item a Variable Unit

Description: Indicates that an article is not a fixed quantity, but that the quantity is variable. This applies to weight, length, and volume. The trade item is used or traded in continuous rather than discrete quantities

**Implementation Note:** This attribute is mandatory and must be populated with Y or N.

Question: A variable trade item is one that is not sold in a fixed quantity. The quantity can vary from container to container. Molding is sold in bundles that will vary in the number and/or length of pieces. Green lumber may be sold in varying unit sizes based on the shipment method, time of year or mill. Are these Variable Trade Items?

Answer: Moulding and similar items should **NOT** be treated as Variable Measure Trade Items. The best example of a true Variable Trade Item is a box of chickens. It nominally will contain 25 one-pound chickens, but might weigh 25.5 lbs and is sold by the pound. The purchaser never knows the exact weight that will be received.

In the case of moulding, if it is sold by the linear foot, the customer will get the linear feet ordered. If it is sold by the piece, the customer will get the number of pieces by length that were ordered. The fact that moulding can be ordered with these two different units of measure does not make it a Variable Trade Item.

**Manufacturer**

Description: GLN identifying the manufacturer of a trade item. May or may not be the brand owner, could be a contract manufacturer. This is a repeatable field

Question: When a distributor buys from multiple manufacturers and the product is considered a commodity, how do we represent the same products that are shipped if they come from different manufacturers? What about when we ship mill direct not from our own mill?

Answer: A distributor that buys products and applies their own UPC to the product will use their own GLN.

On-going Issue – The retailers want to be able to use the UPC to identify the shipper of the product. Their suggested guideline is:

Manufacturer to Retailer – Use Manufacturer's GLN
Manufacturer to Distributor to Retailer – Use Distributor's GLN here and to create GTIN. If product is labeled by Manufacturer, use Manufacturer GLN.

Many forest products manufacturers are small and do not have GLNs. The standard would suggest that the distributor would issue standard GTINs to all of their suppliers so that the retailer could order the product with one GTIN, even if it came from multiple manufacturers. Until retailers start to order by GTIN, the industry will have a blend of manufacturer and distributor GTINs in use.

**Name of Brand Owner**

Description: Descriptive name of the party who owns the brand of the trade item.

**Implementation Note:** Hardlines extension requires Brand Owner GLN, so this is also required.

**Name of Manufacturer**

Description: Descriptive name of the manufacturer of the trade item. Hardlines requires Manufacturer GLN, so this attribute is required.

See implementation questions for Manufacturer.

**Net Content**

Description: The amount of the trade item contained by a package, as claimed on the label. This is at the "each" level. If there are 50 nails in a box or 100 tablets in a bottle, the net content may only be "1".

**Implementation Note:** Required field if item is flagged as consumer unit. Supplied value is singular.

Question: Some weights and measures are required by law in some areas, what do the retailers want to see here and in what unit of measure? As this is a measurement rather than a description, can it be used to address the net / nominal size issue?

Answer: Net / nominal distinction cannot be dealt with in this attribute. The volume of a lumber item will be calculated using the actual (net) dimensions of the product.

Question: Would the net content of a piece of lumber be one piece?

Answer: As this attribute refers to the "each", the net content for most lumber products will be "1". If the selling unit contains multiple pieces (box of shims) would be the number of shims in the box. Net volume is not what they are asking for.

Question: What will be the net content of a piece of a round product such as a tabletop or a baluster?

Answer: As this attribute refers to the "each", the net content for these lumber products will be "1". Net volume is not what they are asking for.

Question: Lumber product weights will vary from run to run, from plant to plant and from season to season. How should we state the net weight of the product?

Answer: Lumber products will use the average net weight of the specific product at the time of shipment. The individual product will **not** include a prorated portion of the weight of the dunnage.

Question: Green lumber may vary by more than 20% from the annual average from season to season, how we want to handle it?

Answer: We would use a high average that is calculated to ensure the weight never exceeds 20% higher throughout the seasons.

## Ordering Lead Time

Description: The normal delivery time measured from receipt of order by the seller until trade item is shipped by the seller. Lead time is defined as from date of receipt of PO by the seller to shipment date the product leaves the seller.

**Implementation Note:** Needed only if the Trade Item is flagged as an Orderable Unit.

Hardlines Best Practice: While this attribute is optional in the standard, Hardlines retailers have indicated their intention to reject any item notifications that omit this attribute value, so as a best practice this field should always be populated with the standard lead times for trade items.

Question: How will the retailers use this information? Lead times for the retailers are negotiated and vary by retailer. Should we fill with this attribute with our standard lead time (e.g. 10 days)?

Answer: This attribute is required if the Trade Item is flagged as an Orderable Unit. Manufacturers should list their **standard** lead times for all items.
**Example:**
12 hours, 48 hours, 4 days

**Order Quantity Maximum**

Description: A quantity (number or count), typically used to control or limit new product launch or seasonal order quantities. This attribute may be relationship dependant. The attribute is optional, and should only be used if applicable. The attribute is typically left blank.

Question: Is this needed on the every-day items that are not seasonal or limited quantities and if so, what would the retailers want us to fill this in with? The attribute allows for 999999999; what do the retailers want to see?

Answer: This attribute is Situational and only applies if the Trade Item is flagged as an Orderable Unit. It should only be used on those items where it applies (i.e. new product releases, seasonal items and limited productions). If not needed, leave blank. A blank will be taken as no maximum quantities apply.

**Order Quantity Minimum**

Description: Represents an agreed to minimum quantity of the trade item that can be ordered. The attribute applies to each individual order, and may be a fixed amount for all customers in a target market. The attribute is optional and is typically left blank.

**Implementation Note:** If the product type is not an orderable unit, there should not be a minimum quantity set.

Question: We produce lumber and package it in standard size units. Freight costs are such that most manufacturers are unwilling to sell product in less than truck load or less than carload quantities. Other lumber products may have sub-bundles within a master pack. Distributors may be willing to ship at the sub-bundles level. The same thing applies to other products where, depending upon which plant the product comes from, the smallest shipping unit may be 36 or it may be 48. Which do we put as the minimum quantity?

Answer: For most lumber products, if the GTIN is a Dispatch Unit, the minimum will be 1. That is, the minimum order quantity is one unit. In the question about different quantities on a pallet, manufacturers will have different GTINs for each size unit and the order quantity minimum will still be one.

**Order Quantity Multiple**

Description: The order quantity multiples in which the trade item may be ordered.

**Implementation Note:** If the product type is NOT an orderable unit, there should not be a minimum or multiple.

Question: Lumber products can be packaged with a variety of pieces per unit depending on the plant and what size units the customer has specified. What quantity do we fill-in for the Base Unit of this Trade Item?

Answer: Lumber products will typically enter "1" for this attribute. Each unit size will have a unique GTIN and the customer will order individual units. This attribute is not for indicating the number of pieces per unit.

**Ordering Unit Of Measure**

Description: The alternate Unit of Measure that supports trade items that are ordered by the Retailer with one Unit of Measure, but sold with another Unit of Measure. This attribute affords the ability to specify multiple units of measure by which an item may be bought and sold.
Example: Lumber ordered by linear board footage and sold by the piece.
**Implementation Note:** This is a Hardlines extension attribute and is trading partner dependent.

**Packaging Material Code**

Description: This attribute numerically represents the type of material used to create the packaging material of the trade item based on an EAN.UCC defined code list.

Example: "2" = Aluminum, and "8" = Wood

**Implementation note:** This attribute is used in conjunction with Packaging Material Description

Question: Has the code source for the packaging attributes been identified yet?

Answer: The code list is dynamic and subject to change, always refer to the latest version. This information is available from many sources including your data pool, or from GS1 US. The current list used by GDSN is attached as Appendix 1 for reference only.

Hardlines Best Practice: Until specific new codes are approved, we suggest lumber manufacturers use code 92 – Tubes, metal or plastic; 58 – Metal or 79 – Plastic depending on the type of banding used by the manufacturer.

**Packaging Material Description**

Description: System-generated text value based on the EAN.UCC system code list for packaging Material Code.

Example: GL = "Glass" AL = "Aluminum"

**Implementation note:** This attribute is used in conjunction with Packaging Material Code
Question: For lumber products typically sold as “units”, how do the retailers want the packaging described?

Answer: Manufacturers will typically use BDG (Banding).

**Packaging Type Code**

Description: This attribute represents the type of material used to create the packaging material of the trade item based on the ANSI DE 103 defined code list. It is used in conjunction with Packaging Type Description.

Example: "2" = Aluminum, and "8" = Wood

**Implementation note:** The packaging material code is currently based on ANSI X12 data element DE 103 code list

Question: Has the code source for the packaging attributes been identified yet?

Answer: The ANSI X12 Code 103 list, parts one and two, should be used. As this code list is dynamic and subject to change, always refer to the latest version. This information is available from many sources including your data pool, or from GS1 US. The current list used by GDSN is attached as Appendix 2 for reference only.

Hardlines Best Practice: Until specific new codes are approved, we suggest lumber manufacturers use code 92 – Tubes, metal or plastic; 58 – Metal or 79 – Plastic depending on the type of banding used by the manufacturer.

**Packaging Type Description**

Description: A system-generated text description based on the Packaging Type Code. The attribute is repeatable per Packaging Type Code.

**Implementation note:** The packaging material code is currently based on ANSI X12 data element DE 103 code list

**Quantity of Children**

Description: The number of **unique** next lower level GTINs contained in a complex (multiple-part) trade item.

Question:
What is a complex trade item?

Answer: Trade items created and sold as a package or kit of products for specific uses (deck kits, house kits, playhouse kits, storage building kits, garage kits, etc.) but **sold** as one unit represent a complex trade item. They will contain multiple GTINs for the component parts that make up the kit.

Example: An 8 x 10 deck kit with GTIN 0 12345 00000 3 contains the following:

| Quantity | Description | GTIN |
|---|---|---|
| 16 pieces | 5/4”x6”x10’ Radius Edge Decking | 0 12345 67890 5 |
| 6 pieces | 2”x10”x10’ #2 Treated SYP | 0 12345 78901 4 |
| 2 pieces | 2”x10”x8’ #2 Treated SYP | 0 12345 89012 3 |

The trade item is sold as an 8x10 Deck Package with GTIN 0 12345 00000 3. The Quantity of Children for this Trade Item would be 3.

**Quantity of Complete Layers Contained In A Trade Item**

Description: The number of layers of the base trade item contained in a complete layer of a higher packaging configuration in hierarchical packaging structure of a trade item. This is typically known as “HI”, and does not apply to any pack sizes less than a pallet. Required attribute for shipping units such as pallets that are GTIN marked.

Example: Cases of Trade item “A” are packed 8 cases per layer on the pallet and 4 layers high. The value of this attribute is "4".

Question: We sell siding products with an end cap (sub-bundle) that has 6 pieces of siding inside it. The individual pieces of siding may be labeled with a UPC-A and the end cap (sub-bundle) may be marked with a UPC-A as it can be a sellable unit. The unit of siding is also marked with an ITF-14 encoding the GTIN of the individual piece inside the pallet. This attribute is required if the item is a Shipping Unit marked with a GTIN but not required if the trade item is a Base Unit. When filling out the attributes for the sub-bundle of 6 pieces of siding, it is a Shipping Unit and is GTIN marked. Is it also a Base Unit? How do we complete these fields?

Answer: It is possible to have a UPC-A GTIN that is not a Base Unit. An item hierarchy may contain only one base unit, but multiple consumer units. If the individual pieces of siding within the sub-bundle have a UPC-A, then the single piece of siding would be the base unit and a consumer unit. The number of layers in this case will be the layers of individual pieces in the pallet. If the individual pieces of siding inside the sub-bundle do not carry a UPC-A and are not intended for individual sale then the sub-bundle would be the base unit (the lowest level of the hierarchy) and the number of layers will be based on the layers of sub-bundles in the pallet. In most cases, this value will just be the number of layers of product in the unit of lumber.

**Implementation Note:** Placing both the UPC-A and the ITF-14 on a case violates current EAN.UCC standards. Manufacturers who must apply both types of bar codes on a case to meet retailer mandates should ensure that the two bar codes do not appear on the same surface to prevent confusion with distribution center and retail scanning systems. In addition, since a trade item may have only one identity, the bar codes must both carry the same information.

Example:

Trade Item UPC-A contains: 61414112345C
Trade Item ITF-14 contains: **00**61414112345C

**Quantity of Layers Per Pallet**

Description: The number of layers that a pallet contains. Only used if the pallet has no GTIN. It indicates the number of layers that a pallet contains, according to supplier or retailer preferences. Required attribute for shipping units such as pallets, when pallets are not GTIN marked. If no pallet level GTIN exists, this attribute can be used to indicate how a pallet can be built, if the trade item were to ship on a pallet. It is **STRONGLY** recommended that Pallets be assigned GTINs.

**Implementation Note:** This attribute will typically be left blank for lumber products as our shipping units typically are labeled with a GTIN.

**Quantity of Trade Items Contained In A Complete Layer**

Description: The number of trade items contained in a complete layer of a higher packaging configuration in hierarchical packaging structure of a trade item. This is typically known as "TI", and does not apply to any pack sizes less than a pallet. Required attribute for shipping units such as pallets that are GTIN marked.

Example: Cases of Trade item "A" are packed 8 cases per layer on the pallet and 4 layers high. The value of this attribute is "8".

**Returned Goods Policy**

Description: A code that describes the policy for defective, damaged or non-salable goods. Values include: DFC - Destroy for Credit; RFC - Return for Credit, HFI - Hold for Inspection or CFA - Call for Authorization.

Question: Is this applicable to all layers of the hierarchy?

Answer: Yes, this attribute is used to reflect how manufacturers will handle items being returned from the retailer, not from the end customer to the retailer, and reflects the manufacturer's "standard" policy.

**Selling Unit Of Measure**

Description: Describes the measurement used for the selling unit of the trade item to the end consumer. A trade item may have only 1 Unit of Measure. The trade item's Unit of Measure is mandatory on Consumer Units.

Example: The item is sold to the end consumer as an each, pair, case, roll, set box, etc.

**Implementation Note:** This is a Hardlines extension attribute and is trading partner dependent.

**Source Data Pool**

Description: Each GTIN listed within the GDSN has a single location for data registered with the GS1 Global Registry. The Source Data Pool GLN refers to the Data Pool hosting the data content. This data pool must provide the GLN they want used. The data pool

facilitates interoperability within the Global Data Synchronization Network (GDSN). Through electronic means and in a standardized format, the data pool allows the Data Source to obtain, maintain and exchange information on items and parties. It supports functionality required by the Data Source to handle Data Loading, Item Registration, Publications and Notifications.

**Implementation Note:** The third party service provider will typically fill in this attribute.

**Stacking Factor**

Description: A factor that determines the maximum stacking for the product. Indicates the number of levels the product may be stacked. Item can be either nested or stacked. This field is where you indicate how many GTINs are nested or stacked. Nesting increment would also need to be provided – additional dimension added when products are nested.
Example: Engineered wood I joist

Question: How will the retailers use this information and do you need it?

Answer: This attribute is Situational and should only be used on those GTINS where it applies. Used at DC's and in shipping. Lumber producers will use this attribute to communicate the maximum number of shipping units that can stack on top of each other.

**Stacking Weight Maximum**

Description: The maximum admissible weight that can be stacked on the trade item. This uses a measurement consisting of a unit of measure and a value. This will be used for transport or storage to allow user to know by weight how to stack different trade item one on top of the other.

Question: How will the retailers use this information and do you need it?

Answer: This attribute is Situational and should only be used on those GTINS where it applies. Used at DC's and in shipping. Lumber producers will use this attribute to communicate the maximum weight that can be stacked on top of a shipping unit.

**Target Market Country Code**

Description: The target market code indicates the country level or higher geographical definition in which the information provider will make the GTIN available to buyers. This indicator does not in any way govern where the buyer may re-sell the GTIN to consumers.

**Implementation Note:** Supplied value is a valid Country Code and matches the Country Code added to the RCIR (Registry Catalogue Item Registry).

Examples: 124 = Canada 484=Mexico 840 = United States

Question: We manufacture lumber in the US and Canada and plants in both countries use the same GTIN for the same item. We will fill orders from whichever plant has the material and ship it wherever it needs to go. This means that lumber made in the US may ship to Canada and vice versa. We ship from either plant to support fill rate. How do we handle this attribute?

Answer: This is a repeatable attribute so both countries should be listed.

**Trade Item Unit of Measure**

Description: Describes the measurement used for selling unit of the trade item to the end consumer. The trade item's Unit of Measure is mandatory on Consumer Units. A trade item may have only one Unit of Measure.

Question: Is this the stocking, selling or purchasing UOM? Retailers may buy and sell the same products in different ways, for example, Retailer "A" purchases and sells molding by the piece; Retailer "B" purchases the same molding by the hundred lineal feet (CLF) and sells it by the lineal foot (LF). The same scenario also applies to lumber which is purchased by the thousand board feet (MBF) and sold by the piece or lineal foot. What UOM are we supposed to put here?

Answer: This attribute describes the measurement used for selling unit of the trade item to the **end consumer**. The fact that moulding can be ordered with these two different units of measure would require two unique GTINS.

Question: Some manufacturers sell Rail Car loads. Can this be the highest level in the hierarchy? Would the unit be considered a bundle instead of the top tier of the hierarchy?

Answer: Rail car will work in the hierarchy.

**Variant**

Description: Attribute to communicate information such as length and width of tape on a roll. Manufacturer of this type of product will need to send this information in this attribute.

Question: This is a text attribute. What do the retailers want in this field?

Answer: This attribute will be used to communicate characteristics that are not clearly explained in the description. For example, plywood producers might include "full thickness" or "scant" and wall board producers might include "tapered edge" or "square edge".

**Volume**

Description: The measurement of the volume of the trade item. A numeric value that represents the product volume expressed in a cubic measurement. This attribute is required on orderable units only.
Question: Volume and Volume Units are listed as a mandatory attributes Do we need to include these in our attribute listing and, if so, what values do the retailers want to see here?

Answer: Retailers plan to calculate this from the actual dimensions provided in the Height, Width and Depth fields. The calculation of Volume is defined as Height x Width x Depth

Example: 90X40X48 = 172,800 cubic inches / 1728 = 10 Cubic Feet