

Order and Precedence

The terms listed below are assembled into major groupings and ordered in a manner that makes the entire document more easily referenced. The major groupings are;

- General Terminology
- Components and Component Assemblies
- Cleat Orientation
- Cleat Arrangement
- Cleat Sequence
- Weight
- Dimensions
- Crating Process
- Delivery Conditions
- Assembly Methods
- Styles
- Base Styles
- Rules
- Classifications
- Other

Definitions of Terms Specific to This Document

Crate – For the purpose of this document only, the term Crate shall be used to include crates of all configurations, wood boxes, storage containers, transport containers and any other similar container or assembly to which these terms may apply.

General Terminology

Performance Standard – A collection of rules and guidelines developed primarily as a result of industry use. The standard must be proven to be common and effective.

Engineered Standard – A collection of rules and guidelines developed by scientific method and proven effective in a controlled test environment.

Content – An item or collection of items to be contained within the crate or for which the crate will be built. If more than one item of the same or of different description are intended to go into one crate, those items will collectively be termed the Content and will be referred to singularly.

Design – A collection of Style, rules, Classifications, characteristics, Components, component sizes and component placement relative to other components. Any variation of a Design will result in the creation of a new Design.

Material Group – A collection of predetermined Materials used in the initial design of a crate. For example; insect eradicated woods verses non-eradicated woods.

Material – Tangible item that has not yet, and will become a Component.

Component – One or more Material items of exact similarity in size, weight and composition to each other, that is a part of a crate.

Unsupported Span – A distance from the inside edge of a cleat to the nearest inside edge of the nearest parallel cleat on the same panel.

Unsupported Area – The area created by two perpendicular Unsupported Spans.

Components and Component Assemblies

Board – A plank material. Most commonly comprised of wood lumber but may be made from processed or synthetic materials.

Deckboard – A Board that, when used, make up the top surface area of a Base.

Fillerboard – A Board that is narrower than and the same thickness as an adjacent Deckboard. Positioned alongside one or more Deckboards. Primarily used to reduce the amount of waste in a Deck. Also known as a **Filler**.

Headerboard – A Board that is sometimes positioned as the inside surface and near the bottom of End Panels. Used to strengthen the crate for lifting and to provide strength against twisting. Positioned along-side of and displacing lumber Deckboards when used with a lumber deck. Also known as a **Header**.

Loadboard – Primarily used as a support to disperse weight from a product to deck components which in-turn, directly support weight down to the ground. Used to strengthen the crate for lifting and to provide strength against twisting. Positioned intermixed with and displacing lumber Deckboards when used with a lumber deck. Positioned above Panelboards when used with a Panelboard deck. Formerly Load Bearing Members.

Wideboard – A Board that is wider than and the same thickness as an adjacent Deckboard. Primarily used to reduce the amount of waste in a Deck.

Cleat – A plank material used to provide support to a crate and/or Content. Most commonly comprised of wood lumber but may be made from processed or synthetic materials.

Framing Cleat – A cleat that is positioned at or near the edge of a panel with the intent of adding rigidity to that panel and intended to increase the surface for fasteners. Primarily used to fasten one panel to another. The existence, size and orientation of a Framing Cleat is determined by Style. See also: Style.

Support Cleat – A cleat that is positioned anywhere other than at the edge of a panel. When Framing Cleats are used, a Support Cleat will be positioned within the perimeter created by the Framing Cleats. Support Cleat quantity and placement are controlled by Rules. See also: Rules.

Batten Cleat – A Cleat primarily used to provide rigidity to lumber sheathed panels. Batten Cleats are oriented perpendicular to the lumber sheathing. Batten Cleat quantity and placement are controlled by Rules. See also: Rules.

Diagonal Cleat – A cleat primarily used to add lateral support to a lumber sheathed panel. Most often used in pairs pointing in opposing directions on the same panel, if a panel is not large enough, pointing in opposing directions on opposing panels. The angle of a Diagonal Cleat is dependant on the surface are available on a panel. Never oriented parallel to any panel edge. Diagonal Cleat quantity and placement are controlled by Rules. See also: Rules.

Panel – One of five (top, front, back, left or right) surface structures in a crate comprised of lumber and/or panelboard sheathing, framing cleats and support cleats.

Panel Position – The position of a panel on a crate as viewed from the front.

Top Panel – The panel on the upper surface of the crate.

Side Panel – Also known as **Left-to-Right Panels**. On Light-duty and Medium-duty crates, the panels with lengths that are most typically equal to the Outside Length. On Heavy-duty crates, the panels with lengths that are most typically equal to the Outside Length minus (End Panel sheathing thickness * 2)

End Panels – Also known as **Front-to-Aft Panels**. The vertical panels that are not the Side Panels

Base Panel – See Deck.

Panel Type – A panel can be one of three general types

Open Panel – A panel that has a consistent space between Sheathboards.

Closed Panel – A panel that is comprised of solid or near solid sheathing.

Frame Panel – A panel without any sheathing. It may be comprised of various types of cleat.

Cap – All five Panels (top, sides and ends) explicitly excluding the Base. Panels may or may not be fastened to each other.

Base – The lower portion of the crate on which the Content rests. Primarily divided into the Deck and the Lower Assembly. Typically comprised of some or all of the following: Deckboards; Filler Boards; Load Members; Headers; Skids; and Rub Strips.

Deck – The Deck

Lower Assembly – The Skids, Rub Strips and any other component that are placed below the Deck.

Skids – Lumber members that rest directly below the Base when Base Cleats are not used and directly below the Base Cleats when they are used. Used to provide support for the Base and to provide a common fastening surface for base

components. Used to create a gap below the Base to allow for fork lifting when Rub Strips are not used.

Rub Strips – Lumber and sometimes segmented wood members that are positioned below Skids or below a Sill to allow for fork lifting from the front or back of a crate. May run perpendicular to skids or in the opposite direction. Formerly Rubbing Strips.

Collar –

Gusset – A flat piece of panelboard used to provide support where multiple cleats come together. Placed on the side of the cleats opposite the Sheathing.

Joist Assembly – A collection of one Joist, zero or two Vertical Joist Supports and zero, two or four Horizontal Joist Supports. One crate will typically include more than one Joist Assembly. The quantity of Vertical Joist Supports and Horizontal Joist Supports is determined by the desired design parameters. If Vertical Joist Supports are used, there are always two per Joist. If Horizontal Joist Supports are used, there are always four per Joist.

Joist – A lumber member that supports the Top Panel from below the Top Panel OR from within the constraints of the Top Panel. Typically will run the shortest direction of the length or width of a crate.

Vertical Joist Support – A lumber member that is placed inside the vertical panels of a crate and provides direct support to a Joist. Is often fastened to the inside surface of a Panel and is supported on the bottom by the Deck. Two are used for each Joist when a Joist is not supported by other means. The thickness of two Vertical Joist Supports are added to the Content Dimensions to determine the Inside Dimensions of a crate.

Horizontal Joist Support – A lumber member that is placed inside the vertical panels of a crate to prevent lateral movement of a Joist. Is often fastened to the inside surface of a Panel, parallel to a Joist. Four are used for each Joist when a Joist is not fastened to and made a part of the Top Panel.

Fasteners –

Assembly Fastener – A fastener such as a nail or bolt that is used to complete the Assembly Process. Most often, Assembly Fasteners are not intended to be removed except in the event of rebuilding or repairing the crate.

Closure Fastener – A fastener that may or may not be the same as an Assembly Fastener and is used to close a crate after the Packing Process is complete. The closure fasteners used are often selected because of their reusability or because they facilitate easy opening of the crate at the crates shipping destination.

Cleat Orientation – The direction a Cleat lays in reference to the crate.

Left-Right – Any Cleat on the Base, Top or a Side that is oriented from Left-to-Right. Also known as an LR Cleat.

Front-Aft – Any Cleat on the Base, Top or an End that is oriented from Front-to-Aft. Also known as an FA Cleat.

Top-Base – Any Cleat on a Side or End that is oriented from Top-to-Base. Also known as a TB Cleat.

Cleat Arrangement – A series of Support Cleats that span an Unsupported Area. May be divided by Support Cleats placed at a right angle to the subject arrangement.

Leading Cleat – The first Support Cleat applied to a panel in its given orientation. Typically the leftmost or uppermost cleat when more than one cleat exists in an arrangement. When multiple cleats in an arrangement are identical in all ways including length and one of them is a Leading Cleat, they will all be termed Leading Cleats.

Middle Cleat(s) – The second Support Cleat applied to a panel in its given orientation if one is applied. Only considered if the cleat in question is not identical to the Leading Cleat. When multiple cleats in an arrangement are identical in all ways including length and one of them is a Middle Cleat, they will all be termed Middle Cleats.

Trailing Cleat – The third Support Cleat applied to a panel in its given orientation if one is applied. Only considered if the cleat in question is not identical to the Leading Cleat or the Middle Cleat.

Cleat Sequence – The sequence in which cleats are applied in relation to orientation of the cleat to other cleats.

Primary Cleat – The first Cleat Arrangement applied.

Secondary Cleat(s) – The second Cleat Arrangement applied. Unique in its orientation to the Primary Cleat(s).

Thirdary Cleat(s) – The third Cleat Arrangement applied. Unique in its orientation to the Primary Cleat(s) and Secondary Cleat(s).

Fourthary Cleat(s) – The fourth Cleat Arrangement applied. Unique in its orientation to the Primary Cleat(s), Secondary Cleat(s) and Thirdary Cleat(s).

Fifthary Cleat(s) – The fifth Cleat Arrangement applied. Unique in its orientation to the Primary Cleat(s), Secondary Cleat(s), Thirdary Cleat(s) and Fourthary Cleat(s).

Weight – The weight of Content in local units explicitly excluding the weight of the crate and excluding the weight of any packing materials.

Range of Weight – The range between the minimum weight and the maximum weight represented inclusive of the weights stated.

Dimensions – The term Dimensions shall not be used alone. Any reference to Dimensions should include the term Product, Inside, Outside, or other information to identify what dimensions are being referenced. In the event that the term Dimensions is erroneously used alone, it shall pertain to the dimensions of Content.

Range of Dimension – The range between the minimum value and the maximum value inclusive of the value referenced. Range of Dimension may be further expressed as **Range of Length, Width, or Height**.

Length – If used without reference shall refer to Content Length. Measured left-to-right.

Width – If used without reference shall refer to Content Width. Measured front-to-aft.

Height – If used without reference shall refer to Content Height. Measured top-to-bottom. The term Depth should be avoided to avoid confusion with a front-to-aft measurement.

Deck Surface – The highest point created by Deckboards, Fillerboards, Wideboards, Loadboards and/or Deck Panelboard explicitly excluding Headerboards. Primarily used to provide a reference for the Deck Thickness so as to determine the Outside Depth of the crate.

Deck Thickness – The distance from the Deck Surface to the bottom of all components that make up the Deck Surface. This explicitly excludes Headerboards. Also, as a note, Skids and Rub Strips are not a part of the Deck. They are components of the Lower Assembly.

Material Dimensions – Dimensions of a Material

Material Thickness – Least of the Materials three dimensions

Material Width – Mid of the Materials three dimensions

Material Length – Greatest of the Materials three dimensions

Component Dimensions – Dimensions of a Component

Component Thickness – Dimension as measured from outside to inside the crate and measured from the Panel or Deck of which the Component is affixed to.

Component Width – Least of the remaining two dimensions

Component Length – Greatest of the remaining two dimensions

Panel Dimensions – Dimensions of a Panel as it is positioned on a crate. Excludes any protrusions caused by Batten Cleats.

Panel Thickness – The Panels dimension as measured from the inside facing surface to the outside facing surface. The lesser of the three dimensions.

Panel Width – Pertains only to End Panels and Top Panels. The horizontal dimension of the panel from the front to the aft.

Panel Length – Pertains only to Side Panels and Top Panels. The horizontal dimension of the panel from the left to the right.

Panel Height – Pertains only to Side Panels and End Panels. The vertical dimension of the panel from the top to the bottom.

Content Dimensions – Measured as a product is oriented as it is intended to be packed within a crate.

Content Length – Greatest of the horizontal surface distances from left-to-right including any protrusions from a primary surface. Also known as CDL.

Content Width – Lesser of the horizontal surface distances from left-to-right including any protrusions from a primary surface. Also known as CDW.

Content Height – The distance of a products surface from the lowest point to the highest point vertically. Also known as CDH.

Inside Dimensions – The Length, Width and Height of a Crate measured from the inside surface of a Panel or the Deck Surface to the opposing surface.

Inside Length – Content Length + (any desired gap * 2) + (thickness of packing materials * 2) + (Header thickness * 2). Also known as IDL.

Inside Width – Content Width + (any desired gap * 2) + (thickness of packing materials * 2) + (Vertical Joist Support thickness * 2). Also known as IDW.

Inside Height – Content Height + any desired gap + Joist thickness + thickness of upper packing materials + thickness of upper packing materials. Also known as IDH. See Also: Joist which is newly defined from its use in MIL-C-104

Outside Dimensions – The Length, Width or Height of a Crate measured from the outermost surfaces.

Outside Length – Inside Length + Left Panel thickness + Right Panel thickness + maximum thickness of any protruding hardware or Collar. Also known as ODL.

Outside Width – Inside Width + Front Panel thickness + Aft Panel thickness + maximum thickness of any protruding hardware or Collar. Also known as ODW.

Outside Height – Inside Height + Top Panel thickness + Deck Thickness + maximum thickness of any protruding hardware or Collar. Also known as ODH.

Crating Process – A collection of processes that begin with a design concept for crating Content and ending in the closing of a crate around Content.

Design Process – The process of identifying the appropriate Style, packing method, quantity and type of Materials including fasteners, and construction parameters to use in the process of safely crating Content.

Cutting Process – The process of cutting components to dimensions identified in a Design.

Construction Process – The process of attaching components to each other to result in a Panel or Deck.

Assembly Process – The process of fastening various panels together and/or fastening panels to the Deck before and in preparation of loading Content into the crate. Typically the last phase completed in a manufacturing plant if the crate is to be shipped elsewhere before the Closure Process will occur.

Packing Process – The process of attaching or inserting any component inside the crate other than joists or joist supports for the purpose of stabilizing or isolating Content. Also includes inserting Content inside the crate.

Closure Process – The process of attaching any panels together and/or fastening panels to the Deck after the Packing Process. After the Closure Process, the crate is ready for transporting.

Delivery Condition – The final process to be performed before transferring a Crate through the supply chain.

Design – No Material transfer will occur. The customer will receive a copy of, or access to a Design.

Cut – The crate will be supplied to the requestor in individual parts, non fastened to another and will include all required fasteners.

Assembled – A requestor would request a crate to be provided Assembled only if Content is not provided to the crate manufacturer.

Closed – The final process performed by the manufacturer of the crate is the Closure Process. The Packing Process will not be performed by the manufacturer if the customer did not provide the manufacturer with Content, in which case any packing Materials that are included in the design will be delivered with the crate.

Special – The Design or crate shall be provided in a condition as separately noted.

Closure Condition – Indicates the point at which the Assembly Process is completed and the Closure Process starts. The panels that are left 'off' are those that will be fastened to the Assembly during the Closure Process.

TO – Top Off

TFO – Top and Front Off

TEO – Top and End Off

FO – Front Off

EO – End Off

CapOff – Cap Off

KD – Knocked Down, all panels and the Base are unattached to each other. In effect, the Assembly Process does not occur.

Sleeve – Sides and Ends are assembled to each other but not attached to the Top Panel or Base

Setup – The crate is completely closed during the Assembly Process.

Style – Used to generally identify the components and construction parameters of the Cap of a crate. May be mixed with any Base Style, but typically the first character of the Style designation will match the first character of the Base Style designation.

LPO – Light-duty, plywood sheathed, outside framed – Includes all general D6251/D (PPP-B-601) wooden boxes

LLO – Light-duty, lumber sheathed, outside framed – Includes most PPP-B-621 where outside cleats and battens are specified.

LMO – Light-duty, mixed (partial plywood and lumber) sheathed, outside framed – Includes D6251/D Par. 7.1.3

LPI – Light-duty, plywood sheathed, inside framed

LLI – Light-duty, lumber sheathed, inside framed – Includes most PPP-B-621 where inside cleats and battens are specified.

LMI – Light-duty, mixed (partial plywood and lumber) sheathed, inside framed

LPN – Light-duty, plywood sheathed, no framing

LLN – Light-duty, lumber sheathed, no framing – Includes a PPP-B-621 style 1

LMN – Light-duty, mixed (partial plywood and lumber) sheathed, no framing – Includes a D6251/D Par. 7.1.3 w/o Cleats

MPO – Medium-duty, plywood sheathed, outside framed – Includes all D6256/D (MIL-B-26195)

MLO – Medium-duty, lumber sheathed, outside framed

MMO – Medium-duty, mixed (partial plywood and lumber) sheathed, outside framed

MPI – Medium-duty, plywood sheathed, inside framed

MLI – Medium-duty, lumber sheathed, inside framed – Includes PPP-B-621 style 7

MMI – Medium-duty, mixed (partial plywood and lumber) sheathed, inside framed

HPO – Heavy-duty, plywood sheathed, outside framed

HLO – Heavy-duty, lumber sheathed, outside framed

HMO – Heavy-duty, mixed (partial plywood and lumber) sheathed, outside framed

HPI – Heavy-duty, plywood sheathed, inside framed – Includes Mil-C-104 class 1

HLI – Heavy-duty, lumber sheathed, inside framed – Includes Mil-C-104 class 2

HMI – Heavy-duty, mixed (partial plywood and lumber) sheathed, inside framed

HPO – Heavy-duty, plywood sheathed, outside framed

HLO – Heavy-duty, lumber sheathed, outside framed

HMO – Heavy-duty, mixed (partial plywood and lumber) sheathed, outside framed

Base Style – Used to generally identify the components and construction parameters of the Base.

LSkid – A Light-duty skid style base. Typically includes Framing Cleats.

HSkid – A Heavy-duty skid style base. Typically includes Headersboards and may include Loadboards.

HSill – A Heavy-duty sill style base.

Rules – A set of guidelines that determines the placement of Support Cleats on a Panel. One rule is associated with each panel or pair of panels (ends, sides, top) except for tops on heavy-duty crates which do not use rules. May also apply to the base on crates that use a light-duty base or a sill base. In some instances, a panel must be of a predesired dimension before any support cleats are applied. If the panel dimensions are too small for support cleats the 0 – No Materials rule shall apply.

0 – No Materials – No Support Cleats will be used for the designated panel

A1 – Front-to-Aft only – Support Cleats will only be oriented to lay from the Front of the panel to the Aft. Applies only to top and end panels

A2 – Front-to-Aft first – After applying Front-to-Aft cleats, cleats are placed in the opposing direction

A3 – Front-to-Aft then Single Diagonals – After applying Front-to-Aft cleats, diagonal batten cleats are applied.

A4 – Front-to-Aft then Cross Diagonals – After applying Front-to-Aft cleats and diagonal batten cleats, cleats are placed that cross the earlier applied diagonal batten cleats

- B1 – Left-to-Right only** – Support Cleats will only be oriented to lay from the Left of the panel to the Right. Applies only to top and side panels
- B2 – Left-to-Right first** – After applying Left-to-Right cleats, cleats are placed in the opposing direction
- B3 – Left-to-Right then Single Diagonals** – After applying Left-to-Right cleats, diagonal batten cleats are applied.
- B4 – Left-to-Right then Cross Diagonals** – After applying Left-to-Right cleats and diagonal batten cleats, cleats are placed that cross the earlier applied diagonal batten cleats
- C1- Top-to-Base only** – Support Cleats will only be oriented to lay from the Top of the panel to the Base. Applies only to end and side panels
- C2 – Top-to-Base first** – After applying Top-to-Base cleats, cleats are placed in the opposing direction
- C3 – Top-to-Base then Single Diagonals** – After applying Top-to-Base cleats, diagonal batten cleats are applied.
- C4 – Top-to-Base then Cross Diagonals** – After applying Top-to-Base cleats and diagonal batten cleats, cleats are placed that cross the earlier applied diagonal batten cleats
- D1 – Divide greatest span only** – Support Cleats will be oriented so as to divide the greatest of the panels two dimensions
- D2 – Divide greatest span first** – Support Cleats will be oriented so as to divide the greatest of the panels two dimensions first then secondary Support Cleats are oriented in the opposing direction
- F1 – On Seams Left-to-Right** – Support Cleats are applied to cover the seams of the panelboard. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied covering the greatest dimension of the panelboard then secondary support cleats are applied to the shortest panel dimension. The Left-to-Right assumes that any trailing panelboard will be placed to the right end of the panel.
- F2 – Midsheet Left-to-Right** – Support Cleats are applied to cover the seams of the panelboard and positioned mid-sheet. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied running the greatest dimension of the panelboard then secondary support cleats are applied to the shortest panel dimension. The Left-to-Right assumes that any trailing panelboard will be placed to the right end of the panel.
- F3 – On Seams Out-to-In** – Support Cleats are applied to cover the seams of the panelboard. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied covering the greatest dimension of the panelboard then secondary support cleats are applied to the shortest

panel dimension. The Out-to-In assumes that any trailing panelboard will be placed in the center of the panel.

- F4 – Midsheet Out-to-In** – Support Cleats are applied to cover the seams of the panelboard and positioned mid-sheet. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied running the greatest dimension of the panelboard then secondary support cleats are applied to the shortest panel dimension. The Out-to-In assumes that any trailing panelboard will be placed in the center of the panel.
- F5 – On Seams In-to-Out** – Support Cleats are applied to cover the seams of the panelboard. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied covering the greatest dimension of the panelboard then secondary support cleats are applied to the shortest panel dimension. The In-to-Out assumes that any trailing panelboard will be divided evenly and placed at each end of the panel.
- F6 – Midsheet In-to-Out** – Support Cleats are applied to cover the seams of the panelboard and positioned mid-sheet. Panelboard orientation is assumed to be from Top-to-Base on the end and side panels and from Front-to-Aft on top panels. Support Cleats are first applied running the greatest dimension of the panelboard then secondary support cleats are applied to the shortest panel dimension. The In-to-Out assumes that any trailing panelboard will be divided evenly and placed at each end of the panel.
- G1 – Across Sheathing** – Support Batten Cleats are oriented at a 90 degree angle to lumber sheathing
- J1 – 2-Point Sections (Single Diagonals)** – The application of Single Diagonals after applying other Support Cleats.
- J2 – 4-Point Sections (Cross Diagonals)** – The addition of Cross Diagonals to a 2-Point Section
- J3 – 8-Point Sections – One High** – The addition of Cross Diagonals to a 2-Point Section
- J4 – 8-Point Sections – Two High** – The use of two multi-point sections placed one above the other and separated by an L-R Support Cleat
- J5 – 8-Point Sections – Three High** – The use of three multi-point sections placed one above the other and separated by an L-R Support Cleat
- K1 – Match Skids only** – Support Cleats are added to run parallel to Skids. The quantity of Support Cleats is determined by, and is the same as, the number of skids
- K2 – Match Skids first** – After Rule K1 is run, Support Cleats are added at a 90 degree angle to the primary support cleats
- S1 – Single Sill** – Applied only to Sill style bases. Results in the outer framing of the sill being of one layer.

S2 – Double Sill – Applied only to Sill style bases. Results in the outer framing of the sill being double layered.

Rule Spacing – Some Rules require values to identify a desired maximum Unsupported Span.

Start Rule – A distance that must be achieved in the terms expressed before Support Cleats are applied. If this distance is not achieved, Rule 0 is applied

Then Rule – A second distance that must be achieved in the terms expressed before a second Support Cleat may be applied perpendicularly to the first.

Classifications –

Load Type – Provided to guide in the construction of the crate and in identifying packing needs. If no Load Type is specified, the Load Type shall be Easy.

Easy – A Packaging Engineer is not required. Any individual with common packing experience can safely identify the packing requirements given standard industry guidelines.

Average – Requires the oversight of a Packaging Engineer. A Packaging Engineer may be required to create and should verify the Design on behalf of the manufacturer.

Difficult – Requires a Packaging Engineer to design the crate and to directly supervise the loading of the crate.

Treatment – Multiple treatments and/or multiple applications of a treatment may be applied. If no treatment is specified, the treatment shall be Untreated.

Untreated – No treatment applied.

Eradicated – All wood members should be eradicated as per requirements indicated by separate notation.

Preservative – A standard grade commercial wood preservative should be applied.

Fire Retardant – A fire retardant should be applied to meet requirements indicated by separate notation.

Painted – A painted finish should be applied as indicated by separate notation.

Camouflage – Camouflage paint should be applied to meet standards indicated by separate notation.

Other – Other treatment as indicated by separate notation.

Durability –

One-Way – Intended for a single shipment in one direction. Damage to the crate during opening should not be considered.

Two-Way – Intended for round-trip shipment. Crate should be usable for two shipments and reclosure one time should

be considered. Addition and packing of extra nails or other closure fasteners as well as tools should be considered.

Reusable – The crate is intended to be reused an unlimited number of times until it is no longer serviceable.

Rebuildable – The crate is intended to be reused an unlimited number of times and should be constructed and assembled to allow for replacement of individual components and/or panels as required.

Special – Special durability considerations as indicated by separate notation.

Other –

Inside Framed – Framing Cleats are placed inside the crate often resulting in a smooth sheathed surface on the outside.

Outside Framed – Framing Cleats are placed outside the crate often resulting in a smooth sheathed surface on the inside.

Panelboard – Any sheeted panel Material including plywood, particleboard, Oriented Strand Board, fiberboard or any other suitable Material. Typically identified as a Material that's physical thickness is primarily relative to its application and its length and width are considerably less relative.

Panelboard Sheathing – Panelboard when used to provide a solid surface area to a crate. Only used in reference to the Cap. When panelboard is used as part of the Base, it is referred to as Deckboard. Either Panelboard Sheathing or Lumber Sheathing is required for any particular panel to enable that panel to exist.

Lumber – Any Material that is primarily defined by its width and length and is selected based on those dimensions and where the Materials length is considerably less relative when considering its application. Typically solid wood but may consist of strips of panelboard or other synthetic or fabricated Materials so long as they are suitable for their application.

Lumber Sheathing – Lumber when used to provide a near solid surface area to a crate. May also be spaced as in the construction of an Open Panel. When Lumber is used as part of a Base, it is referred to by other names. Either Panelboard Sheathing or Lumber Sheathing is required for any particular panel to enable that panel to exist.

Support Span – The span that is used to determine the length and/or spacing of Support Cleats.

L-R Span – The span as viewed from Left-to-Right on a Top Panel, Side Panels or a Deck.

F-A Span – The span as viewed from Front-to-Aft on a Top Panel, End Panels or a Deck.

T-B Span – The span as viewed from Top-to-Base on Side Panels or End Panels.