

Fall 2006 (v7.31)

"How To" Guide for Using Alpine's On-Line Documentation

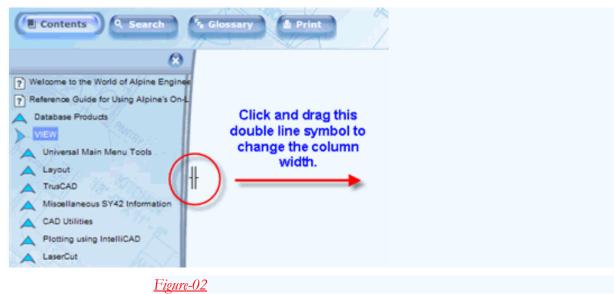
Alpine is pleased to provide you with documentation for our software products. Presentation of the documentation from our website enables us to provide you with the most up-to-date documented information we have to offer. This site continues to be under construction, so please check it frequently for recent additions. In order for you to understand how this website documentation has been setup and is best used, please refer to the explanations below. We hope you find this documentation beneficial and welcome your comments. Please email your comments to: fmansen@www2.alpeng.com.

Recommended Tools and Practices

- The Alpine Documentation Help (ADH) is best viewed using Microsoft Internet Explorer (IE). Other internet browsers may be used (Firefox, Opera, etc.), however the format of some text and symbols used to enhance the presentation of our documentation information might not appear visually accurate.
- ✦ You may identify the release version number of the topics you open by single clicking the underlined topic title (*Figure-01*). Click anywhere else on the page to close this information dialog window.



If you would like to enlarge the Table of Contents (TOC) column, place your mouse near the border line. When the double line symbol appears, hold down the LMB and drag open the column to a new size (*Figure-02*).



★ If the size of the Table of Contents (TOC) column is not large enough to view the entire topic title, hover your mouse over the TOC title. After a few seconds the full topic title appears in a pop-up window (*Figure-03*). When the mouse is moved off of the title, the pop-up disappears.



If you cannot locate the subject information you are looking for in the TOC, click the Search button at the top of the IE page. Type the information you are searching for and then press the <enter> key or click the Go Search button (*Figure-04*). When the information is located, click the Contents button. You should notice the topic information you searched for is highlighted, revealing where the subject material is located.



★ The definition of terms and abbreviations, such as DW (Dialog Window), are provided in the Glossary. The Glossary may be accessed at any time by clicking the button at the top of the IE page labeled Glossary (Figure-05).

(Contents	9. Search	⁶ Glossary	Print
	<u>Figure-(</u>)5	

Any individual documentation topic may be printed at any time by clicking on the button labeled **Print** at the top of the **IE** page (*Figure-06*). All topics are formatted to be printed in Landscape mode, so be sure to set your printer properties accordingly.



When the documentation is accessed from the Alpine website, an introduction page welcoming you to Alpine is opened. At the bottom of this page we have included "How Do I" buttons (*Figure-07*), which are quick links to topics you may be looking for information about. Click the button to open the list of topics, and then click the subject you wish to view.

Links to various <u>How Do I</u> topics throughout Alpine Help:
How Do I (VIEW)
How Do I (Database Products)
<u>Figure-07</u>

Symbol Definition

Symbols and italicized text explanations are placed throughout the documentation to help identify information to pay special attention to. The following definitions describe what the specific symbols are meant to convey.

- ! <u>Special Note:</u> Meant to call attention to additional important subject details.
- **Remember:** Important steps or procedures which should not be forgotten or overlooked.
- *TimeSaver:* Shortcut or alternative method for accomplishing a task or function.
- Reference: When mention is made within the subject documentation to additional relevant information you may want to know about, this symbol alerts you to the <u>highlighted and underlined</u> topic you can click to immediately view that additional information.
- <u>Warning</u>: This important symbol identifies critical information which, if ignored or forgotten about, may cause serious consequences, such as improper database backups, layout corruption, etc.

Text Format and Colorization

The text is formatted and colored in such a way as to make the documentation easier to read and understand. Breaking up the dull look of consistent standard black text by adding special colored text, highlights the relevant words dealing with the subject being explained and generally makes it easier to follow along. We hope you agree.

- Words appearing in Arial Bold Custom Blue text identify references to the topic or references relating to the topic. For example, if the topic is about TC Pitch, each time the words TC Pitch appear in the topic document, they are in the Arial Custom Blue format.
- Words appearing in *Italic Green* format identify references to fields or sections. For example, you may see reference to the *Bracing Type* field in the Analysis tab, or the *Material Options* section in the Analysis tab.
- Words appearing in Arial Bold Blue format identify step-by-step instructions. For example, an instruction may read: click Settings, then Job Settings, and then select the Analysis tab.
- Words appearing in Arial Bold Dark Red format identify the result of following step-by-step instructions. For example, here is how the following statement may read: when you click the Load Type button in the Properties for Truss DW, the Loading Options DW is opened.
- ✦ Words appearing in New Times Roman Bold Dark Blue and highlighted in yellow identify an instruction prompt appearing at the bottom of the screen. For example, Select Trusses. <Enter> After Selection.
- Words appearing in Arial Bold Black identify:
 - Multiple option selection choices, such as when a toggle option is opened and you see a selection menu. For example, when you open the Lumber Grade Bumping toggle, you see: Off, Auto, All Chords, TC/BC, and C Segments in the selection menu (Figure-08).

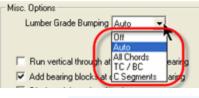


Figure-08

- Abbreviations and numbering such as CLB, TPI, DW, etc., or 12'-0", 7.25, etc.
- Short command instructions, such as press **<Enter>**, or click **OK**, etc.
- ♦ Words appearing in *Italic Red* identify *Figure* numbers. For example: *Figure-V.01*. In regard to figure numbering, the letter in front of the number helps you to identify the software product you are viewing documentation for. V = VIEW, VP = VIEW-Plus, PR = Pro VIEW, SV = Steel VIEW, DP = DataBASE Products (HomeBASE & ProjectBASE), and PV = Panel VIEW.

Glossary Codes

When you select the **Glossary** button (*Figure-05*), Glossary Terms and References are displayed at the left side of the **ADH** screen (*Figure-09*). Each of the terms is followed by one or more letter codes to indicate which Alpine software product(s) the term is relevant to. Some terms are relevant to just one software product (*VIEW* for example), while other terms are relevant to multiple products (*VIEW*, and **Steel VIEW** for example). Use the list below to identify the software product and the associated code ID:

♦ VIEW = V (Wood Truss Design)



- ✦ VIEW-Plus = VP (Wood Truss Design)
- Pro VIEW = PR
- Steel VIEW = SV
- ✦ Panel VIEW = PV
- DataBASE (HomeBASE and ProjectBASE) = DB
- HomeBASE Only = HB
- ProjectBASE Only = PB

PDF Documentation - Library Downloads

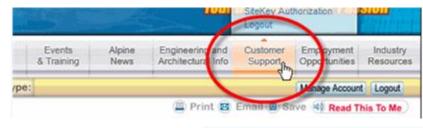
PDF versions of the software documentation are available for download on the Alpine website from the Alpine Document Library (*Figure-10*). Master PDF documentation files are updated as major new software release versions become available. The instructions below direct you to the PDF library location on the Alpine website.

Download 176.72kByte
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Download 187.84kByte
Download 3.49MByte
Download 7.18MByte
Download 4MByte
presented in Download 287.57kByte
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<u>Figure-10</u>

"How To" Guide for Using Alpine's On-Line Documentation

1. From the Alpine website, click your mouse on the tab labeled: **Customer Support** (*Figure-11*).





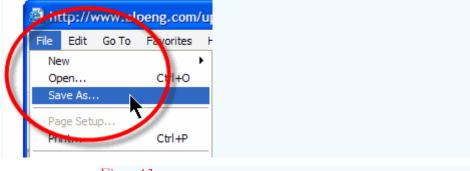
2. Click the screen button labeled: Alpine Document Library (*Figure-12*).

> Home > Customer Support >

Lelow are the special "Customers Only" sections of the web site. Please note that some of these databases (Site Keys, Knowledge Base, etc.) require a specific login for access. This login 1D is separate, and in some cases different from your website login. If you don't already have a user ID for access to the databases, you can <u>RECUEST AN ID</u>. Please include your name and the name and location of your company. You will then be able to access these tools.



3. The PDF documentation may be downloaded into your computer in one of two ways: by either clicking on the *document title* or by clicking the word *Download* (*Figure-10*). In either case, the PDF file is opened by the Adobe viewer. Once opened, select File then Save As to save the PDF file in the desired location on your computer (*Figure-13*).



<u>Figure-13</u>

➢ Glossary

Glossary code term applicable to: V = VIEW, VP = VIEW-Plus, SV = Steel VIEW, PV = Panel VIEW, DB = Database, HB = Home BASE, PB = Project BASE.

Α

- Accepted Engineering Practice (V, SV, PV): An engineering approach which conforms to accepted principals, tests, technical standards, and sound judgment.
- ACRP (Association of Crane and Rigging Professionals) (V, SV): Provides expertise in the lifting and handling of building materials (http://www.acrp.net).
- AIA (American Institute of Architects) (V, SV): From the website at http://www.aia.org, you may locate architects and find information on the profession, contract documents, and more.
- AISC (American Institute of Steel Construction) (SV): http://www.aisc.org.
- AISI (American Iron and Steel Institute) (SV): http://www.steel.org. AISI/COS/NASPEC 2001: North American Specification for the Design of Cold-Formed Steel Structural Members; AISI 2001 Edition. AISI/COFS/GP-2004: Standard for Cold-Formed Steel Framing -General Provisions: 2004. AISI/COFS/TRUSS 2004: Standard for Cold-Formed Steel Framing - Trusses: 2004. AISI/COFS - Practice Guide - COF5-1: Code of Standard Practice for Cold-Formed Steel Structural Framing; 2005.
- Alpine Central (V, SV, PV, DB): Alpine's on-line resource for the use of our industry leading software products. Access into this site requires you to sign-up for a user login ID and password (http://www.alpinecentral.com).
- Alpine Website (V, SV, PV, DB): The Alpine website provides you with a vast amount of useful information at your fingertips, or at the click of your mouse. Access into this site requires you to sign-up for a user login ID and password. Once logged in, you have access to Products & Services, Customer Support, Events & Training, and much, much more (http://www.alpeng.com).
- ANSI (American National Standards Institute) (V, SV): The American National Standards Institute (ANSI) is a private, non-profit organization (501(c)3) that administers and coordinates the U.S. voluntary standardization and conformity assessment system (http://www.ansi.org).
- Apex (V, SV): The point of a truss where sloped chords meet. Also referred to as: Peak.
- Applicable Building Code (V, SV, PV): Building code under which the structure is designed.

- ASCE (American Society of Civil Engineers) (V, SV): Founded in 1852, the American Society of Civil Engineers (ASCE) represents more than 137,500 members of the civil engineering profession worldwide, and is America's oldest national engineering society. ASCE's vision is to position engineers as global leaders building a better quality of life. The Society celebrated its 150th anniversary in 2002 (http://www.asce.org).
- ASTM (American Society for Testing and Materials) (V, SV): http://www.astm.org.
- Attic Scuttle (V, SV): A framed opening with removable cover which provides access to the attic space.
- Attic Truss (V, SV): A truss type where a room space is built into the configuration of the truss.
- AWCI (Association of the Wall and Ceiling Industry) (V, SV, PV): http://www.awci.org.
- Axial Force (V, SV): The number of pounds of tension or compression in a truss member acting parallel to the length of the member resulting from a load applied to the truss.
- Axial Stress (V, SV): The axial force acting along the length of a member, divided by the cross-sectional area of the member. Usually measured in pounds per square inch (psi).

B

Base Metal Thickness (V, SV): The thickness of bare steel exclusive of all coatings.

- BC (Bottom Chord) (V, SV): Horizontal or inclined members which establish the lower edge of a truss, usually carrying combined tension and bending stresses.
- Bearing (V, SV): Structural support of a truss, usually walls, beams, hangers, or posts designed to carry truss reaction loads to the foundation.
- Bending Moment (V, SV): A measure of the bending effect on a member due to forces acting perpendicular to the length of a member. The bending moment at the given point along a member equals the sum of all perpendicular forces, either to the left or right of the point, times their corresponding distances from the point. Usually measured in inch-pounds.
- Bending Stress (V, SV): The force per square inch acting at a point along the length of a member, resulting from the bending moment applied at that point. Usually measured in pounds per square inch (psi).
- **Birdsmouth Cut (V):** A notch over a bearing location which is cut into a rafter, or a top chord member at a girder-cut heel, to allow for the rafter or top chord to extend past the bearing or heel so as to provide an overhang. The top chord application is usually limited to when the depth of the top chord member at the heel is greater than the nominal truss heel depth.
- Blocking (SV): C-shaped, track, break shape, of flat strap material attached to structural members, flat strap, or sheathing panels to transfer shear forces.
- Blocking (V): Wood member which provides edge support for sheathing.

- **Bob-Tail (V, SV):** A term used to describe a full length truss who's length, measured from the heel, has been shortened to meet a header, jog in the wall, etc.. For example, a full length common truss must be "Bob-Tailed" in order to be supported by the fireplace header located a specific distance back from the heel. See also: Stub.
- **BOCA (Building Officials and Code Administrators International) (V):** A model building code located in Country Club Hills, IL, serving primarily the North Central and Northeast United States.
- Bottom Chord Bearing (V, SV): A term usually used to describe the bearing condition of a parallel chord truss which bears (is supported on) it's bottom chord.
- Bottom Chord Upset (V): Slight vertical cut at outside end of truss (Heel) bottom chord made to insure uniform nominal span and tight joints. Usually 1/4-inch. Also referred to as a "Butt-Cut".
- Bottom Plate (V): A horizontal wood member attached to the bottom of a frame wall and connected to floor joists, girders, or other members.
- Braced Frame (SV): An essentially vertical truss system which provides resistance to lateral loads and provides stability for the structural system.
- Bracing (V, SV): Structural elements which are installed to provide restraint or support (or both) to other framing members so that the complete assembly forms a stable structure.
- Bridging (V, SV): Wood or metal members which are placed between trusses and joists in an angled position. Used as an alternative to strongbacking to reduce floor vibration and limit differential deflection.
- **Buckling (V, SV):** The bowing out of line of a member due to compressive forces. In wood members this may be reflected as "Out-of-Plane" bending. With TrussSteel this may be reflected as a kink, wrinkle, or bulge in a member. See Also: CLB (Continuous Lateral Bracing).
- **Building Designer (V, SV, PV):** An individual or organization responsible for the overall building design in accordance with the statutes and regulations governing the professional registration and certification of architects or engineers of the jurisdiction where the building will be located. Also referred to as design professional and registered building designer.
- Built-Up Roof (V, SV): Roofing composed of three to five layers of asphalt material.
- Butt-Cut (V): Slight vertical cut at outside end of truss (Heel) bottom chord made to insure uniform nominal span and tight joints. Usually 1/4-inch. Also referred to as a "Bottom Chord Upset".
- Butt Joint (V): The interface at which the ends of two members or other members meet in a square cut joint.

С

- **C-Shape (SV):** A cold-formed steel shape used for structural and nonstructural framing members consisting of a web, two flanges, and two lips (edge stiffeners). The name comes from the member's C-shaped cross-sectional configuration. It is also referred to as a C-section. Web depth measurements are taken to the outside of the flanges. Flange width measurements also use outside dimensions.
- CAD (V, SV, PV): The acronym for: Computer Aided Design and Drafting software.

- Calcs (V, SV): An abbreviation for the word "Calculations", which typically refers to engineering results generated by the VIEW software analysis routine.
- Camber (V, SV): An upward vertical displacement built into a truss, usually to offset deflection due to dead load.
- Cantilever (V, SV): The portion of a structural member extending beyond its support, where the extended portion is unsupported at its end point (Heel), exclusive of overhang.
- Cantilever Strut (V, SV): The truss web member type which frames to a cantilever bearing. See also: Kicker.

CCFSS (Center for Cold-Formed Steel Structures) (SV): http://campus.umr.edu/ccfss/

- Ceiling Joist (VP): A horizontal structural framing member which supports ceiling and/or attic loads.
- **CFS (Cold-Formed Steel) (SV):** Sheet steel or strip which is formed by: (1) press braking blanks sheared from sheets or cut length of coils or plates, or by: (2) continuous roll forming of cold- or hot-rolled coils of sheet steel; both forming operations are performed at ambient room temperature, that is, without the addition of heat such as would be required for hot forming.
- **CFS Structural Member (SV):** Shape manufactured by press-braking plates sheared from sheet, cut lengths of coils or plates, or by roll forming cold- or hot-rolled coils or sheets; both forming operations being performed at ambient room temperature, that is, without manifest addition of heat such as would be required for hot forming.
- Chord Member (V, SV): A structural member which forms the top or bottom component of a truss.
- **CLB (Continuous Lateral Bracing) (V, SV):** A member placed and connected at right angles to a chord or web to prevent buckling. Required on some chords and webs, depending on their length and the forces in the member. See also: Buckling.
- Clear Span (V, SV): Horizontal distance between interior edges of supports (Clear Opening). Not to be confused with Span.
- Clinched Nail (V): A nail selected to be longer than the member it is driven through and which is bent back the dimension of its excess length. This process is referred to as: Clinching.
- **Collar Tie (V):** A structural framing member located in the upper third of the attic space which ties rafters together to resist roof suction loads at the ridge. Also a horizontal structural member used in Attic Frame truss types to form the Attic room space ceiling.
- Collateral Load (V, SV): The weight of any non-moving equipment or material, such as ceilings, electrical or mechanical equipment, sprinkler systems, and general plumbing.
- **Combined Stress (V, SV):** The combination of axial and bending stresses or shear and bending stresses acting on a member simultaneously, such as occurs in the top chord (compression + bending) or bottom chord (tension + bending) of a truss.
- **Component Assembly (SV):** A fabricated assemblage of cold-formed steel structural members manufactured by the component manufacturer, which may also include structural steel framing, sheathing, insulation or other products, generally hoisted into position and onto its support as an assembled unit.

- Component Design Drawings (SV): The written, graphic and pictorial definition of an individual component assembly, which includes engineering design data.
- Component Designer (SV): The individual or organization responsible for the engineering design of component assemblies. See also: Truss Designer.
- **Component Manufacturer (SV):** The individual or organization responsible for the manufacturing of component assemblies for the project. See also: Truss Manufacturer.
- **Component Placement Diagram (V, SV, PV):** The illustration supplied by the component manufacturer identifying the location assumed for each of the truss components or component assemblies which references each individually designated component design drawing.
- **Composite Lumber (V):** (Structural, wood composites) A family of materials which contain wood in whole or fiber form bound together with an adhesive of natural or synthetic form.
- Compound Cut (V): A double cut made across a members width.
- **Compression (V, SV):** A force caused by loads placed on a member which causes a squeezing or shortening effect on the member, such as with the top chord of a truss when load is applied.
- **Concentrated Load (V, SV):** A load, in addition to uniform design loads, applied at a specific point. Examples include cranes, hoists, HVAC equipment and sprinkler pipes.
- Connection (V, SV): Combination of structural elements and joints used to transmit forces between two or more members.
- **Connector Plate (V):** A truss connector made of steel and usually manufactured with pre-formed teeth which are embedded into the truss lumber by roller, pneumatic or hydraulic presses for the purpose of transferring forces through the chord and web members and the bearing reactions. Also referred to as a "Press-on-Plate", "Truss Plate", or just simply "Plate".
- Construction Manager (V, SV, PV): The individual or organization designated by the owner to issue contracts for the construction of the project and to purchase products.
- Construction Specifications Institute (V, SV): National CAD Standards (http://www.csinet.org).
- Continuous Load Path (V, SV): The interconnection of framing elements of the lateral and vertical force resisting systems, which transfers lateral and vertical forces to the foundation.
- **Contract Documents (V, SV, PV):** The documents, including, but not limited to, plans and specifications which define the responsibilities of the parties involved in bidding, purchasing, designing, supplying, and installing trusses and/or wall panel products.
- Contractor (V, SV, PV): The individual or organization who is contracted to assume full responsibility for the construction of the structure.

Conventional Framing (VP): (Common Framing) Framing with conventional joists, rafters and wall studs.

- Corner Set (V, SV): The assembled combination of Hip Jack and End Jack trusses framing to a Hip Girder or the face of a wall, which create corner ridge lines and end roof planes.
- **Creep (V):** Time-dependant deformation of a structural member under constant load.
- Cricket (V, SV): A portion of a roof where it is built up for the purpose of draining water towards a desired drainage point.
- **CSI (Combined Stress Index) (V, SV):** The CSI value is the combined total of axial, compression, and bending stresses acting on a member simultaneously. CSI results must be 1.00 or less for an acceptable truss design. Any CSI results of 1.01 and greater indicate an unacceptable and failing truss, which must be redesigned to meet the acceptable CSI requirement.
- Cutting Output (V, SV): A listing of material lengths and angles of cut for truss web members and chords.

D

DBIA (Design-Build Institute of America (V, SV): Educational Resources (http://www.dbia.org).

- **Deflection (V, SV):** Displacement of a structural member, such as a truss in place, generally downward, due to the application of loads. Members may also deflect upward or horizontally depending on loads and bearings.
- Design Load (V, SV): The combination of Live and Dead loads as specified by the building designer.
- **Design Professional (V, SV, PV):** An individual who is registered or licensed to practice his or her respective design profession as defined by the statutory requirements of the state in which the project is to be constructed. Also referred to as: Registered Engineer.
- **DF (Duration Factor) (V):** Duration of Load Factor: An adjustment in the allowable stress in a wood member, based on the duration of the load causing the stress. The shorter the time duration of the load, the higher the percentage increase in allowable stress. The option for this design load consideration in the VIEW program is found in the Loading tab of the Job Settings dialog window; the Loading tab of the New Truss Settings dialog window; and the Truss Properties Loading tab, which is located by selecting the Load Type button in the Truss Properties dialog window.
- Diaphragm (V, SV): Roof, floor, or other membrane or bracing system which transfers in-plane forces to the vertical resisting elements.
- **Diaphragm Chord (V):** A diaphragm boundary element perpendicular to the applied lateral load which is assumed to be places in tension or compression due to the diaphragm moment in a manner similar to the flanges of a beam. The wall double top plate often serves as the diaphragm chord, with splices offset to provide continuity.
- Direct Nail (V): A term used to define the application of a nail which is driven perpendicular to the member being nailed. See also: Toenail.
- DL(Dead Load) (V, SV): Dead Loads are the weight of the walls, partitions, framing, floors, ceilings, roofs, and all other permanent construction entering into and becoming a part of a building.
- Double Shear (V, SV): Allowing a force to be distributed through two points rather than one for increased strength.

- **Double ShearTM Fastener (SV):** Patented TrusSteel fastener which allows the fabrication of trusses without flipping in the jig. Double shear action of these fasteners adds stability to trusses.
- Drag Strut (V, SV): Typically a horizontal member, such as a truss or beam, which transfers shear from a diaphragm to a shearwall.
- **Dropped Gable (V):** A gable truss which has its top chord lowered vertically to allow outlooker framing or gable ladder framing to pass over the top chord and form an overhang for the face of the dropped gable end truss.
- Drywall (Sheetrock) (V, SV): An interior finish material, sheet manufactured with gypsum (gypsum board).
- DW (Dialog Window) (V, SV, PV): A window opened in the VIEW software which contains option selections and settings.

Ε

- End Jack (V, SV): An End Jack is typically used to form the portion of a lower roof which slopes up to the face of a Hip Girder condition or to the face of a wall. End Jacks generally have single sloping top chords, are relatively short, and in many cases do not have an end vertical web at the high end of the truss.
- Eng File (Example = T1.eng) (V, SV): Each time you save an engineered truss to your job (using the Save New, Save Replace, or Save As options), the truss is saved under two file extension types: T#.Eng and T#.Pic. The T#.Eng file contains all of the engineering results information used to generate output, and is only saved to the job if the truss has been run through the engineering analysis. Therefore, the *.Eng file by itself cannot be used to regenerate a truss design in the VIEW software.

F

- Fascia (Non-Structural) (V): A non-structural board attached perpendicular to the truss at the end of overhangs, which tie the trusses together.
- Fascia (Structural) (V): A board attached perpendicular to the truss at the end of the overhangs. This fascia board is used to support overhangs, trusses and other components, and is designed by the building designer.
- **FBC (Florida Building Code) (V, SV):** The Florida Building Code became effective on March 1, 2002 and incorporates building, electric, plumbing, mechanical, and administrative codes—accessibility, energy, coastal, manufactured, and state agency codes (http://www.dca.state.fl.us/fbc/index.htm)
- Feather Cut (V): A heel cut which has been made with a zero butt-cut (a sawn member with a "feathered" edge).
- Fireplace Truss (V, SV): A truss type which is designed as a girder to support the framing loads from headers which create the opening for a roof chimney.
- Flange (SV): That portion of a framing member or track which is perpendicular to the web.
- Flashing (v, SV): Pieces of cold-formed steel which are used to make watertight the openings or the seams in a roof system.

Flat Strap (V, SV): Sheet steel cut to a specified width without any bends and typically used for bracing and transferring loads by tension.

- Flexural-Torsional Buckling (V): Buckling mode in which a compression member bends and twists simultaneously without change in crosssectional shape.
- Floor Joist (VP): A horizontal structural framing member which supports floor loads and superimposed vertical loads.

Foundation (V, SV): The structural elements through which the load of a structure is transmitted to earth.

FRT (Fire Retardant Treatment) (V): Chemical application applied to lumber. Caution must be exercised when using FRT lumber and Galvanized steel truss plates, as corrosive considerations and lumber strength characteristics must be taken into account. The option for this design consideration in the VIEW program is found in the Analysis tab of the Job Settings dialog window, and in the Material tab of the Engineering options dialog window.

G

- Gable End Truss (Non-Structural) (V): A truss manufactured to the profile of the mating adjacent truss. It contains vertical "in-plane" members fastened to the chords instead of diagonal web members. It is not a structural truss and requires continuous support by a bearing wall or other load bearing element, such as a beam along the bottom chord.
- Gable End Truss (Structural) (V): A truss manufactured to the profile of the mating adjacent truss. It contains vertical "in-plane" members fastened in-between the diagonal web members and chords. Since this is a structural truss type, typical bearing rules apply.
- **Gambrel Truss (V, SV):** A truss type where the top chord portion of the truss has two pitches between the heel and the peak. The top chord pitch originating from the heel is generally steeper than the pitch which forms the peak.
- **Gauge (SV):** A unit of measurement traditionally used to describe the nominal thickness of sheet and strip steel. Gauge numbers are only a rough approximation of steel thickness, whereas the mil designation is more accurate. The lower the gauge number, the greater the thickness.
- Girder Truss (V, SV): A truss which is designed to support loads (concentrated and uniform) imposed by other trusses or structural framing members. Many Girders are multiple Ply trusses.
- Girt (V, SV): Horizontal structural member which supports wall panels and is primarily subjected to bending under horizontal loads, such as wind load.
- Glue Laminated Timber (V): Any member comprising an assembly of laminations of lumber in which the grain of all laminations is approximately parallel longitudinally, in which the laminations are bonded with adhesives.
- Grade (V, SV): The finished ground level adjoining the building at exterior walls.
- Ground Snow Load (V, SV): Measured load on the ground due to snow accumulation developed from the statistical analysis of weather records expected to be exceeded once every 50 years at a given site.

Gusset Plate (V): A structural member used to facilitate the connection of truss chords and web members at a heel, ridge, or panel point.

Gypsum Association (V, SV): Wall and ceiling finish material (http://www.gypsum.org).

Η

- Hanger (V, SV): The common term used to define the connection hardware used for truss-to-truss, truss-to-wall, and truss-to-beam connections (http://www.strongtie.com).
- Hat-Shape (SV): A singly-symmetric shape consisting of at least two vertical webs and a horizontal stiffened flange which is used as a chord member in a truss.
- Header (VP): A conventionally framed wood girder located between stud, joist, rafter, or truss openings meant to carry loads across the opening.
- Heel (V, SV): The point on a truss at which the top and bottom chord intersect at the end of a truss.
- Hip Jack (V, SV): A Hip Jack is typically defined as a single sloping top chord truss type which is used to form the corner ridge of the roof. A typical application locates the truss at 45 degrees to whatever is meant to support it, generally but not limited to, a Hip Girder. Hip Jacks are considered Girders, since they are the critical load carrying members supporting the End Jacks which make up the Corner Set of a hip roof design.
- Hip Master (V, SV): Hip truss which is designed to support roof jacks or common framing, and hip corners. Also referred to as #1 Hip and/or Primary Hip.
- Hip Set (V, SV): A truss system for a sloped roof surface which extends from a roof ridge, towards the eave, consisting of Jack, Hip Jack, Primary Hip, and standard Hip trusses.
- Hydraulic Press (V): A press consisting of a "C" clamp hydraulic cylinder, or an I-beam platen, or flat upper pressing platen, powered by hydraulic cylinders which are used to embed truss connector plates into wood chord and web material.

Ι

- **I-Joist (VP):** A structural member manufactured using sawn or structural composite lumber flanges and structural panel webs, bonded together with exterior exposure adhesives, forming an "I" cross-sectional shape.
- IBC (International Building Code) (V, SV): Incorporated into the ICC. Refer to the ICC definition for additional information.
- ICBO (International Conference of Building Officials) (V): Incorporated into the ICC. Refer to the ICC definition for additional information.

- **ICC (International Code Council) (V, SV):** The International Conference of Building Officials (ICBO), now known as the International Code Council (ICC), publishes codes that establish minimum performance requirements for all aspects of the construction industry. ICBO is a founding member of the International Code Council (ICC) which was established in 1994 to develop a single set of comprehensive and coordinated national model construction codes (http://www.iccsafe.org).
- IE (Internet Explorer) (V, SV, PV): Microsoft Internet Browser. Recommended tool for viewing Alpine documentation, although other browsers do work.
- Installer (V, SV, PV): Party responsible for the installation of truss and wall panel products.
- Interior Bearing (LB and NLB) (V, SV): An interior bearing is a bearing condition which is located between two exterior supports. There are two types of interior walls, but only interior load bearing (LB) walls beneath a truss provide an interior bearing condition for a truss, thereby generating a loading reaction to be transferred into a ground footing or truss designed to support the roof reaction and wall load. The term "Non-Load Bearing" (NLB) indicates the presence of interior wall partitions which are not designed to support any portion of a truss. Note: NLB walls do not transfer any truss loading (zero reaction), and care must be taken to only use a connection which allows the truss to "float" above the wall, and not transfer any reaction load. Recommended NLB connections are: Simpson STC and DTC products.
- IRC (International Residential Code) (V, SV): Incorporated into the ICC. Refer to the ICC definition for additional information.
- **ISO** (International Organization for Standardization) (V, SV, PV): The ISO is a worldwide federation of national standards bodies organized to promote the development of standardization and related activities in the world with a view to facilitating the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological and economic activity.

J

Jack Rafter (VP): A rafter which spans from a hip or valley beam to a wall plate or ridge, respectively.

Jack Studs (PV): A vertical structural element which does not span the full height of the wall and supports vertical loads.

Jig (V, SV, PV): The fixture which holds the truss in position (generally on an assembly table) until rigidly fastened with connectors.

Joint (V, SV): The centerline of the point of intersection at a panelpoint where a web, or webs, meet a chord. See also: Panel Point. Joist (VP): A horizontal roof or floor framing member.

K

Kicker (V, SV): The name for the truss web member type which frames to a cantilever bearing. See also: Cantilever Strut. **Kingpost (V, SV):** The typical name for the vertical web placed under the TC peak in a truss.

- Knee Brace (V, SV): This brace type is used as a means of providing shear reinforcement to a building to resist horizontal loads from wind and seismic events. Typically used on post-frame buildings and pole-barn buildings. Modern computer methods for post-frame building design and roof diaphragm analysis have virtually eliminated the need for knee bracing when the building has been designed properly. However, the design of knee braces usually requires discussion between the column designer and the truss designer to ensure the knee brace, truss and column are accurately designed. Lack of this coordination may result in overstressed conditions in the truss and/or column.
- Knee Wall (V): The vertical webs in an Attic truss which form the walls of a room space.

L

- L-Brace (V): A bracing type where the edge of the wide surface of the brace is nailed flush with the outside face of the web member requiring the brace. This means the width of the web member is perpendicular to the width of the brace. A cross section of this condition resembles the letter "L". See also: T-Brace.
- Ladder Panel (V): Prefabricated panel fastened to the roof eave to create a sloped overhang. See also: Outlooker.
- Lateral Bracing (V, SV): A member installed and connected at right angles to the chord or web member of a truss to resist lateral movement.
- Lateral Force Resisting System (V, SV): The structural elements and connections required to resist racking and overturning due to wind and/or seismic forces imposed upon the structure in accordance with the applicable building code.
- Lateral Forces (V, SV): Non-gravity forces acting on a building such as wind or seismic.
- Lateral Load (V, SV): A horizontal force created by wind or earthquake which acts on a structure or its components.
- LB (Load Bearing) (V, SV): Generally refers to a wall condition which supports the load of trusses connected to it.
- Level Return (V, SV): Filler placed horizontally from the end of an overhang to the outside face of a wall to form soffit framing.
- LGSEA (Light Gauge Steel Engineers Association) (SV): LGSEA Field Installation Guide for Cold-Formed Steel Roof Trusses; LGSEA 551d Design Guide for Construction Bracing of Cold-Formed Steel Trusses; LGSEA 551e Design Guide for Permanent Bracing of Cold-Formed Steel Trusses (http://www.lgsea.com).
- LL (Live Load) (V, SV): Any load which is not of permanent nature, such as snow, wind, seismic, moveable concentrated loads, furniture, etc. Live Loads are generally of short duration.
- LMB (V, SV, PV): Left Mouse Button.
- Load (V, SV): Force or other action which results from the weight of building materials, occupants and their possessions, environmental effects, differential movement, or restrained dimensional changes.
- Load Affect (V, SV): Forces, stresses, and deformations produced in a structural component by the applied loads.

LVL (Laminated Veneer Lumber) (VP): A composite of wood veneer sheet elements with wood fibers primarily oriented along the length of the member.

Μ

Material Supplier (V, SV, PV): A person or entity responsible for furnishing framing materials for the project.

MCA (Metal Construction Association) (SV): http://www.metalconstruction.org.

- Mil (SV): A unit of measurement used in measuring the thickness of thin steel elements. One mil equals 1/1000 of an inch (e.g., 33 mil = 0.033 inch).
- Miter Cut (V): A single cut made at an angle to the member length.
- MMB (V, SV, PV): Middle Mouse Button.
- **MOE (or E value) (V):** Modulus of Elasticity: A measure of the stiffness of a given material. The larger the M.O.E. (E value), the stiffer the piece and the less it deflects under load.
- Moment (V, SV): A force which produces rotation and proportionate bending stresses upon a member.
- Moment Frame (SV): A framing system which provides resistance to lateral loads and provides stability to the structural system primarily by shear and flexure of the framing members and their connections.
- MSR (Machine Stress Rated) (V): Lumber which is graded by the process of running it through an electronic machine to determine its stiffness value (E). The allowable stresses are then determined from this value.

Multiple Span Truss(es) (V, SV): The span made by a truss, or trusses, with intermediate supports.

\mathbf{N}

- Nail Plate (V): Light-gauge steel connector plates with pre-punched holes through which nails are driven. Generally used as a method of truss repair where nail type, quantity, and use feasibility is determined by a registered engineer.
- Nailer (Scab) (V): A member fastened to another member by nails. Generally used as a method of truss repair where nail type, quantity, and use feasibility is determined by a registered engineer.
- NDS (National Design Specification) (V): The National Design Specification for Wood Construction is a publication of the American Forest & Paper Association (AFPA) which provides an appendix of lumber sizes, grades, species, and allowable stresses (http://www.afandpa.org/).
- NLB (V, SV): Non-Load Bearing: Generally refers to a wall condition which DOES NOT support the load of trusses. See also: Interior Bearing.

- Nominal Dimension (V): An approximate dimension usually used to describe the size of an item such as a 2x4, which actually measures 1-1/2" x 3-1/2".
- Nominal Load (V, SV): Magnitude of the load specified by the applicable building code.
- Nominal Span (V, SV): Horizontal distance between outside edges of the outermost supports. Also referred to as just: Span.
- Notch (V): The term given for a vertical and crosswise horizontal cut made in a chord, joist or rafter. Chords, joists and rafters must never be cut without the approval of a registered engineer.

0

- OP (Output Processor) (V, SV, PV): Tool used in VIEW to generate output.
- OSHA (Occupational Safety and Health Administration) (V, SV, PV): Workplace safety regulations and procedures (http://www.osha.gov).
- **Outlooker (V):** Blocking which frames to the face of a Gable End truss, or frames over the dropped top chord of a Gable End truss, to generate an overhang, or eve condition for the face of the Gable truss. See also: Ladder Panel (Also referred to as an: Outrigger).
- Overhang (V, SV): The extension of the top chord (usually) or bottom chord of a truss beyond the heel of the truss.

Р

- P.E. (Professional Engineer) (V, SV, PV): The acronym used to identify a Professional Engineer, usually found at the end of a persons name.
- Panel (V, SV): The chord segment defined by two successive web joints in a truss.
- Panel Length (V, SV): The centerline distance between joints measured horizontally.
- Panel Point (V, SV): The centerline of the point of intersection in a joint where a web, or webs, meet a chord. See also: Joint.
- **Parapet (V, SV):** A wall at the edge of a roof, generally vertical, used for cosmetic appearances of a building. Parapets may also be used for hiding ventilation systems upon the roof from view when looking up at the building from the ground.
- **PBC (SV):** Pitch Break Connector.
- PCT (Parallel Chord Truss) (V): This term refers to a truss type where the top chord and the bottom chord are parallel to each other. This term defines, but is not limited to: flat trusses, sloping flat truss, SY42 trusses, and parallel chord scissor truss types.
- Peak (V, SV): The point of a truss where sloped chords meet. Also referred to as: Apex.
- Permanent Bracing (V, SV): Bracing attached to a roof or floor system which is intended to remain permanently on the roof or floor to reinforce the structure.

Permanent Load (V, SV): Load in which variations over time are rare or of small magnitude. All other loads are variable loads.

- **Pic File (Example = T1.pic) (V, SV):** Each time you save an engineered truss to your job (using the Save New, Save Replace, or Save As options), the truss is saved under two file extension types: T#.Pic and T#.Eng. The T#.Pic file contains all information pertaining to the picture properties of the truss design, such as the lines which form the chords, webs, plates, etc, as well as the input for the truss engineering portion of VIEW (engineering settings). If the truss is saved prior to engineering, only the T#.Pic file is saved. Therefore, the *.Pic file by itself CAN be used to regenerate a truss design using the VIEW software.
- Piggyback Truss (V): A truss supported directly on top of another truss. Trusses are piggybacked due to height restrictions in fabrication and delivery.
- Pitch (V, SV): The inches of vertical rise in 12 inches of horizontal run for inclined members, generally expressed as: 3/12, 4/12, 8/12, etc. See also: Slope.
- Pitch Break (V, SV): A chord joint location where the pitch of two chord segments change.
- Plans (V, SV): Drawings prepared by the design professional for the owner of the project. These drawings include, but are not limited to floor plans, framing plans, elevations, sections, details and schedules, as necessary to define the desired construction.
- Plumb Cut (V): A top chord cut which is plumb to the building floor line. This cut at the end of overhangs is generally used to provide for the vertical installation of fascia.
- Ply (V, SV): One truss of a Girder truss.

PPM (V): Plate Placement Method.

- Primary Hip (V, SV): Hip truss which is designed to support roof jacks or common framing, and hip corners. Also referred to as #1 Hip and/or Hip Master.
- PSL (Parallel Strand Lumber) (V): A composite of wood strand elements with fibers primarily oriented along the length of the member.
- **Purlin (V, SV):** Horizontal structural member which supports roof deck and is primarily subjected to bending under vertical loads such as snow, wind or dead loads. May also be used to brace the top chord of trusses in certain applications, resulting in an applied axial force.
- **Purlin Truss (V):** A commercial truss type specifically designed to support a panelized roof system. Purlin trusses are generally spaced at 6'-0" on-center or greater, and support rafter or roof panels perpendicular to the truss TC. Purlin trusses generally support no ceiling load.

Q

QC (V): Quality Control plating standards which utilize the PPM or TCM plating methods.

- **Radio Button (V, SV, PV):** Throughout the documentation, reference is occasionally made to "Radio Buttons". A "Radio" button is a setting function used for the purpose of selecting one option from a number of options in the same category. Generally, only one button in a Radio button group may be selected at a time. The Radio selection button is round and contains a black dot when selected, which resembles the button or knob on a radio, thus the name "Radio" button.
- **Rafter (VP):** A horizontal or sloping structural roof framing member which supports all roof-surface loading and may also support exposed ceiling loading where applicable.
- **Rafter Tie (VP):** A structural framing member located in the lower third of the attic space which ties rafters together to resist thrust from gravity loads on the roof.
- Rake (V, SV): The inclined edge of a roof with the intersection of the gable.
- Rake Overhang (V, SV): The horizontal projection of the roof measured from the outside face of a gable endwall to the outside edge of the roof.
- Rational Engineering Analysis (V, SV): Analysis based on theory which is appropriate for the situation, relevant test data (if available), and sound engineering judgment.
- Reaction (V, SV): Forces acting on a truss through its supports which are equal (but opposite) to the sum of the dead and live loads.
- Ridge (V, SV): The line formed by the joining of the top edges of two sloping roof surfaces.
- Ridge Beam (VP): A structural component which creates a roof or ceiling ridge, and is designed to support and transfer loads from components such as rafters, top chords of roof trusses, and ceiling joists.
- Ridge Board (VP): A non-structural member used at the ridge of a roof to provide a common nailing surface and point of bearing for opposing roof rafters.
- Ridge Vent (V, SV): A prefabricated and formed metal strip placed along the apex of the roof to allow exhaust ventilation in combination with intake soffit or gable end ventilation.
- Rim Board (VP): A Rim Board forms a Rim or Band around the ends of floor components to prevent twisting and provides shear transfer and end restraint of the floor members.

RMB (V, SV, PV): Right Mouse Button.

Roller Press (V): A press which embeds connector plates into lumber by forcing then through two opposing rollers.

Roof Scuttle (V, SV): A framed opening in commercial roofs surrounded by a hinged door used for access to a commercial roof.

Safety Factor (V, SV): Factor which accounts for deviations of the actual strength from the nominal strength, deviations of the actual load from the nominal load, uncertainties in the analysis that transforms the load into a load effect, and for the manner and consequences of failure.

Scupper (V, SV): A roof drain.

- SDI (Steel Deck Institute) (SV): Diaphragm Design manual (http://www.sdi.org).
- Secondary Bending (V, SV): The bending stress in a member caused by the deflection of the whole truss.
- Setback Distance (V, SV): Typically refers to the distance a Hip Girder or Primary Hip Truss (#1 Hip) is positioned from the parallel end wall. End Jack trusses which frame to the Hip Girder are generally based on the "setback" length.
- SFA (The Steel Framing Alliance) (SV): Training for Steel framers (http://www.steelframingalliance.com).

Shear Wall (V, SV): Wall which provides resistance to lateral loads in the plane of the wall and provides stability for the structural system.

Shop Drawing (V, SV, PV): Drawing used for the production of individual component assemblies for the project.

Shoulder Joint (V, SV): The term given the joint on a Hip where the top chord pitch changes from sloped to flat. Also referred to as: Hip Joint.

Sill Plate (PV): A horizontal wood member anchored to the foundation and supporting floor joists.

- Slider (V): The term used for dimensional lumber inserted between the top and bottom chords at the heel joint in the plane of the truss to reinforce the top and bottom chord heel joint. This member is generally used for load transfer from the top chord into the bottom chord when the chords would otherwise not be touching, such as in a stub end condition.
- Slope (V, SV): The incline angle of the roof described in inches of rise per foot of run (e.g., 6/12). See also: Pitch.
- Snow Drift Load (V, SV): A loading condition which occurs on the top chord of trusses due to the increased accumulation of snow from the effects of wind. A snow drift will typically form on the leeward slope of a roof. The wind removes the snow from the windward roof surface and deposits it on the leeward surface.
- Soffit (V, SV): The underside of a roof overhang or truss cantilever end.
- Soffit Vent (V, SV): Prefabricated soffit material with perforated openings created for the purpose of providing intake ventilation.
- Software (V, SV, PV): Computer programs such as VIEW, SteelVIEW, HomeBASE and ProjectBASE (Database), PanelVIEW, etc., used to generate engineering, management, and fabrication information.
- Span (V, SV): See "Nominal Span" and "Clear Span".
- Specifications (V, SV, PV): Written instructions, which, with the plans, define the materials, standards, design of the products, and workmanship expected on a construction project.

Splice (V, SV): The point at which chord members are joined together by the use of a fastener to form a single member.

Square Cut (V): A cut perpendicular to the slope of the member at its end.

SRI (Steel Recycling Institute) (SV): http://www.recycle-steel.org.

- Stacked Chords (V): A term used to describe when two top chord members are positioned on top of each other and fastened together using connector plates. Typical application for this condition is used for gable end trusses.
- Static Load (V, SV): A load or series of loads which are supported by or are applied to a structure so gradually that forces caused by change in momentum of the load and structural elements can be neglected and all parts of the system at any instant are essentially in equilibrium.
- STCA (Steel Truss and Component Association) (SV): http://www.steeltruss.org.
- Stress (V, SV): A unit force working within a member, usually expressed in pounds per square inch (psi).
- Strongback (V): A load distribution member typically used in a floor truss system, installed perpendicular through the trusses, and fastened to a vertical web.
- Structural Analysis (V, SV): Determination of load effects on members and connections based on principals of structural mechanics.
- Structural Component (V, SV): Member, connector, connecting element or assemblage.
- Structural Composite Lumber (V): Structural materials bonded with an exterior adhesive. See also: Laminated Veneer Lumber and Parallel Strand Lumber.
- Structural Engineer-of-Record (V, SV): The design professional who is responsible for sealing the contract documents, which indicates that he or she has performed or supervised the analysis, design and document preparation for the structure and has knowledge of the requirements for the load carrying structural system.
- Structural Sheathing (V, SV): The covering (e.g., plywood, oriented strand board or steel deck) used directly over structural members (e.g., joists) to distribute loads, brace walls, and generally strengthen the assembly.
- **Stub (V, SV):** A term used to describe a full length truss who's length, measured from the heel, has been shortened to meet a header, jog in the wall, etc.. For example, a full length common truss must be "Stubbed" in order to be supported by the fireplace header located a specific distance back from the heel. See also: Bob-Tail.
- Stud (PV): A vertical structural element of wall assemblies which transfers vertical and/or lateral loads.
- Sub-Contractor (V, SV, PV): The individual or organization with whom a contractor has contracted to furnish, install and/or install a portion of the project.
- **SY42 (V):** System 42 truss configuration. Instead of the truss material oriented in the 2x4 direction, which provides a 1 1/2" nailing surface of roof and ceiling materials, the lumber in a SY42 truss is oriented in the 4x2 direction, which provides a 3 1/2" nailing surface. SY42 truss types are generally used for, but not limited to, floor applications.
- Symmetrical (V, SV): A truss who's loading and configuration is exactly the same on both sides of the center line of the truss.

Т

- **T-Brace (V):** A bracing type who's width is centered and nailed to the narrow surface of the web member requiring a brace. This means the width of the web member is perpendicular to the width of the brace. A cross section of this condition resembles the letter "T". See also: L-Brace.
- Tail Joist (VP): A joist which is used to frame between an opening header and bearing wall, beam, or another header.
- Tail Rafter (VP): A rafter which is used to frame between an opening header and bearing wall, beam, or another rafter.
- TC (Top Chord) (V, SV): An inclined or horizontal member which establishes the upper edge of a truss, usually carrying combined compression and bending stresses.
- TCM (V): Tooth Count Method.
- Tensile Strength (SV): The property of Steel associated with the maximum stress which can be developed prior to rupture. See also: Ultimate Strength.
- Tension (V, SV): Forces being exerted on a truss member which creates a pulling apart or elongating effect, such as with the bottom chord of a truss when load is applied.
- TL (Total Load) (V, SV): The total of the TCLL (Top Chord Live Load), the TCDL (Top Chord Dead Load), the BCLL (Bottom Chord Live Load), and the BCDL (Bottom Chord Dead Load).
- Toenail (V): A term used to define the application of a nail which is driven at an angle to the member being nailed. See also: Direct Nail.
- Top Chord Bearing (V, SV): The bearing condition of a parallel chord truss which bears on its top chord extension. May also apply to a sloping chord truss bearing on a top chord extension.
- Top Plate (PV): The term used to describe the top member of stud bearing walls. Consists of two members for exterior wood wall construction, and one member for non-bearing wood wall construction.
- **TPI (Truss Plate Institute) (V):** The Truss Plate Institute establishes methods of design and construction for trusses in accordance with the American National Standards Institute's accredited consensus procedures for coordination and development of American National Standards (http://www.tpinst.org/).
- Trimmer (PV): A vertical stud or horizontal beam or joist to which a header is nailed in framing a chimney, stairway, or other opening.
- **Truss (V, SV):** With respect to light-frame construction, a Truss is a structural component assembled from wood members and connector plates, and/or light gauge cold formed steel framing connected together using specified fasteners, designed to carry its own weight and super imposed design loads. The truss members form a semi-rigid structural framework and are assembled such that the members usually form triangles.

Glossary

- **Truss Designer (V, SV):** An individual or organization responsible for the design of wood trusses assembled with connector plates, and/or CFS trusses assembled with patented Alpine fasteners. See also: Component Designer.
- Truss Manufacturer (V, SV): An individual or organization engaged in the manufacturing of in-plant or site-built trusses. Also referred to as the Truss Fabricator. See also: Component Manufacturer.
- TSC (SV): Product acronym for Alpine TrusSteel Chord Material. This chord material is designed to support heaver loads and greater span distances than the TSJ product.
- **TSJ (SV):** Product acronym for Alpine TrusSteel Chord Material. The cross-section of TSJ chord material shows that it is shaped like the letter "J", and is therefore not as strong as the TSC2.75 and TSC4.00 chord material. It is intended to be used for conditions where lighter loads do not require as significant a chord/web size, such as Jacks and short span trusses.

U

- UBC (Uniform Building Code) (V, SV): Incorporated into the ICC. Refer to the ICC definition for additional information.
- UL (Underwriters Laboratories) (V, SV, PV): http://www.ul.com.
- Ultimate Strength (SV): The property of Steel associated with the maximum stress which can be developed prior to rupture. See also: Tensile Strength.
- Unbalanced Load (V, SV): Live loads which are applied non-uniformly across the span of the truss. For example, Snow Drift can cause an Unbalanced Load condition.
- Uniform Load (V, SV): A total load which is equally distributed over a given length, usually expressed in pounds per square foot (psf).

USGBC (U.S. Green Building Council) (SV): http://www.usgbc.org.

V

- Valley (V, SV): A depression in a roof where two roof slopes meet.
- Valley Beam (VP): A beam spanning from the ridge to an inside roof corner, which supports the jack rafters, forming a concave roof line.
- Valley Set (V, SV): A group of trusses required to fill in a section of roof. Valley trusses generally have vertical webs only and are supported on top of other trusses or roof sheathing.
- Variable Load (V, SV): Load which is not classified as permanent load.
- VRML (V, SV): Virtual Reality Modeling Language: Used by the VIEW Layout program to view layouts in a virtual 3D (vrml) mode.

- Web Crippling (SV): The localized permanent (inelastic) deformation of the web member subjected to concentrated load or reaction at bearing supports.
- Web Stiffener (SV): Additional material which is attached to the web to strengthen the member against web crippling. Also referred to as: Bearing or Transverse Stiffener.
- Webs (V, SV): Members which join the top and bottom chords to form the triangular patterns which give trusses their strength. Webs transfer tension and compression stresses to the chord members at panel points.
- Window Sill Plate (PV): A horizontal framing member below an opening.
- WTCA (Wood Truss Council of America) (V): Established in 1983, the Wood Truss Council of America (WTCA) is the only international trade association representing structural wood component manufacturers (http://www.sbcindustry.com/).

Ζ

Z-Shape (SV): A point-symmetric or non-symmetric section which is used as a chord member in a truss.