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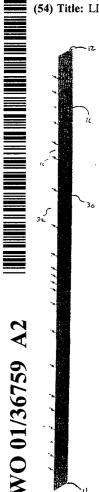
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(54) Title: LINE STRUCK FRAMING STUD



(57) Abstract: A new framing product or member, such as a stud for use in the assembly of a wall of a building. The framing member is of preselected length for use in the assembly of a wall and has a first face and a second parallel face opposite the first face. A pair of parallel side surfaces are at right angles to the first and second faces. The faces and sides extend along the preselected length of the member. The member is pre-marked with a plurality of discrete, visible, markings only at preselected, relevant locations or points required by the several different types of subcontractors to hang or install their specific devices or service members, and may be on either or both of the faces and sides. The member is substantially free of extraneous markings such as premarked grid lines or scales that add markings which are not relevant and make the framing member more difficult to use by masking the relevant discrete markings. The studs may be made from wood, metal such as steel, plastic or any other type of material used to frame a building. The markings are independent of the type of material, although the type of material may affect the manner in which the markings are made.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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LINE STRUCK FRAMING STUD

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/163,128 filed November 2, 1999.

FIELD OF THE INVENTION

The present invention relates to stude used in the construction industry, and more particularly, to stude which have been incrementally marked at select locations.

BACKGROUND OF THE INVENTION

In the construction of homes and other structures, the usual procedure is to first assemble a skeleton or frame around which the rest of the house or structure will be built. Typically, these frames are designed by assembling a series of vertical studs or members to a horizontal beam or member located at the top (i.e., ceiling) and bottom (i.e., floor) of the vertical (i.e., wall) studs. These studs may be formed from wood, composite metal, plastic or any other suitable material. These studs are manufactured in standard lengths of 8', 9', 10' and 12', depending upon their application. In certain circumstances in which the building is to be framed on site, the studs are measured and cut to the appropriate length for assembly. In other circumstances, the studs are measured to the appropriate length, cut to size, assembled and shipped as an assembly to the building site. Even after assembly, additional measurements must be made for installation of various fixtures such as plumbing and electrical fixtures. While each of these measurements can be made by hand using a pencil and measuring tape, this is a time consuming process.

Various tools have been devised to assist in making these measurements in order to reduce the amount of time required to accomplish each measurement. For example, U.S. Patent No. 4,527,337 ('337 patent) discloses a wall framing template to simplify the marking

of a stud. The template utilizes spaced blocks and cutters on a carpenter's template to repetitively lay a series of studding locations along the stringers of the wall framing.

Although the tool can be designed to locate the markings at any set distances, the '337 patent discloses the standard 16" measurement used for vertical stud placement.

Other methods to reduce measurement time during the construction phase include premarking the building material. One such solution is set forth in U.S. Patent No. 5,924,213 (the '213 patent) which discloses placing linear numerical markings along the sides of a sheet, such as plywood to establish a grid pattern on the sheet material based on the measurements. The '213 patent also discloses studs premarked with markings at ¼", ½." and 1" gradations and with stud line locators at 16" intervals. Thus, the '213 patent premarks studs in a manner much like that set forth in the '337 patent. In addition, the studs include gradations so that a desired location can be measured. For example, if an outlet is to be installed 18" from the floor, the required location can be determined by subtracting the width of the sill plate from the grid and marking the appropriate point on the stud. However, the '213 patent does not disclose framing product having premarked measurements indicative of locations for electrical, plumbing and ventilation fixtures.

Another similar method to reduce the task of measuring and calculations is set forth U.S. Patent No. 5,632,095 (the '095 patent) which discloses a lumber product for use in the cutting and assembly of lumber for the framing of a building. The lumber product has a first end and a second end, a face and back surface and opposite edges with a plurality of visible markings imprinted or stamped or otherwise secured on at least one surface for measuring purposes. The visible line markings are spaced at 1/2" intervals and extend substantially across the entire length of the lumber product. At preselected intervals, additional visible

marking lines are imprinted or stamped on the lumber product. These visible marking lines may be of a different color or design so as to distinguish these markings from other markings. While the '095 patent discloses markings, these markings are linear gradations corresponding to the linear length along a wooden building stud, identical to the markings set forth in the '213 patent. The markings are to facilitate the assembly of studs into a framing, at standard assembly locations, 16" and 24", representative of standard locations of stud positions for framing, and are highlighted by use of a different color or design at these locations. However, the '095 patent is limited to wooden framing and does not disclose a framing product having premarked measurements indicative of locations for electrical, plumbing and ventilation fixtures, the locations being specifically color coded to be representative of the type of fixture to be installed at the location and which also indicate the distance of the location from the floor. Thus, these locations require separate calculation to determine their height from the ceiling or floor to account for top plates or sill plates and distinguishing markings to differentiate them from the other various markings on the stud. Like the '213 patent, the '095 patent does not disclose framing product having premarked measurements indicative of locations for electrical, plumbing and ventilation fixtures.

What is needed is a building product that includes the actual location for attachment of a fixture at premarked positions along the product that takes into account measurements for top plates and sill plates. To further reduce the possibilities of error, the premarked positions should be at least color coded to visually identify the type of fixture to be installed at each location, with each type of fixture having a preassigned color or mark.

SUMMARY OF THE INVENTION

During the construction process, various subcontractors must come into a structure at the framing stage and make certain measurements for the installation of items such as electrical outlets, heating ducts, plumbing pipes, etc. These devices or service members are typically located at locations along the vertical studs which are essentially uniform throughout the construction industry nationwide (plus or minus several inches in either direction) and are measured from the wall top plate or sill plate. For example, electrical outlets and other receptacles such as audio, video, and telecommunications, are typically located between about 9" and 20", and typically about 15", above the subfloor. Electrical outlets for vanities are located between about 36" and 48, and typically about 42", above the subfloor; outlets for kitchen counter-tops are located between about 39" and 51", and typically about 45" above the subfloor; light switch panels are located between about 42" and 54", and typically about 48", above the subfloor; and wall sconce fixtures are located between about 60" and 72", and typically about 66" above the subfloor. Furthermore, in order to comply with the Americans with Disabilities Act ("ADA"), electrical switches and grab bars for handicapped people must be placed no higher than 36" above the finished floor.

At the present time, before a subcontractor can hang a particular item or device, he must first go through and measure, using a tape measure or other tool for locating a position and hand mark with a pencil or similar writing instrument on the respective studs where he intends to place each and every device or service member. Even with studs having a measurable scale, he must perform a calculation and apply a mark on the stud to indicate the exact position desired in order to distinguish the desired position from the other scale markings on the stud. The calculating, marking and measuring part of the process adds substantially to the time involved in any particular subcontractor's duties. For an electrical

subcontractor alone, in a house of moderate size, approximately 100 to 600 markings and measurements and typically about 200-400 markings and measurements, may have to be made by manually measuring and/or marking desired locations for fixtures, switches, outlets and the like.

The present invention provides a new framing product or member, such as a stud for use in the assembly of a wall of a building that obviates the need for subcontractors to manually mark and/or measure each and every measurement required. In the present invention, the framing member, such as a stud, is of preselected length for use in the assembly of a wall and has a first face and a second parallel face opposite the first face. A pair of parallel side surfaces are at right angles to the first and second faces. The faces and sides extend along the preselected length of the member. The member is pre-marked, for example, usually at the manufacturing stage of the member with a plurality of discrete, visible, markings only at preselected, relevant locations or points required by the several different types of subcontractors to hang or install their specific devices or service members, and may be on either or both of the faces and sides. In order to simplify the use of the stud or framing member, it should be substantially free of extraneous markings such as premarked grid lines or scales that add markings which are not relevant and make the framing member more difficult to use by masking the relevant discrete markings. In its most basic form, the studs include at least two markings indicative of a height above the subfloor between about 14" to 16" and 47" to 49", preferably at about 15" and 48". On the studs, these markings are positioned between about $12-\frac{1}{2}$ " to $14-\frac{1}{2}$ " and $45-\frac{1}{2}$ " to $47-\frac{1}{2}$ ", preferably at about $13-\frac{1}{2}$ " and about 46-1/2". These measurements correspond to the placement of electrical fixtures, such as outlet boxes and wall switches and represent a large number of the installations required of the electrical subcontractor. The markings can be any visible indication, such as a numeral,

line or dot. The studs may be made from wood, composite, metal such as steel, plastic or any other type of material used to frame a building. As used herein, the term composite is used to refer to commonly available construction materials currently used that include wood as a combination of laminated materials, wood chips or particles used in conjunction with a binder. However, for the purposes of this invention, the term composite may additionally refer to other combinations of materials such as ceramic composites, plastic composites, and wood composites that are available for other applications and which may become economically feasible for use in the building industry and for any composite that may be developed as a substitute for studded framing members. The markings are independent of the type of material, although the type of material may affect the manner in which the markings are made. Thus, while an ink may be suitable for wooden frame product, a paint or a stamping may be utilized to mark metal framing products. The markings are identifiable by coding to the type of equipment that is to be installed at the preselected height and are baselined to the required distance of installation above the sub-floor, and not baselined to the end of the stud. The member or stud length is a variable, but standard sizes are typically used in the industry and are selectable based on the structure requirements. These lengths typically are eight feet, nine feet, ten feet and twelve feet in length. Typical wooden stud cross sections nominally are 2" by 4", commonly referred to as a 2x4, 2" by 6", referred to as a 2x6, or 2" by 8", commonly referred to as a 2x6. While wooden studs are referred to in the industry by their nominal cross section, it is also well-known in the industry that the actual dimensions are smaller than the nominal dimensions. For example, a 2x4 has an actual size of about $1-\frac{1}{2}$ " x $3-\frac{1}{2}$ ". In accordance with the above terminology, the $3-\frac{1}{2}$ " features are termed side surfaces and the 1-1/2" features are termed faces. While any stud could be accommodated to take advantage of the present invention, precut studs having standard

lengths are used widely throughout the construction industry and can be marked as part of the manufacturing process. However, the invention can be embodied as traditional studs (studs which are sold in certain lengths greater than a required length, but which are cut prior to installation, so that the stud will satisfy the particular size requirements of the specific structure). Thus, a 2x4x8 precut stud actually measures 1-½" by 3-½" by 92-5/8"; whereas a traditional 2x4x8 stud measures 1-½" by 3-½" by 96". A 2x4x9 precut stud actually measures 1-½" by 3-½" by 104-5/8", whereas a traditional 2x4x9 stud measures 1-½" by 3-½" by 108". The present invention may also be utilized with firring strips, which are usually narrower than a stud, having a length of 8 feet and a cross section of about 3/4" by about 2".

An advantage of the present invention is that a contractor can locate the required standard position for installation of equipment by referring to the markings on the stud without having to make a measurement or perform a calculation followed by marking on the required position on the stud.

Another advantage of the present invention is that a contractor who installs a specific type of equipment can determine the location for standard installations of his specific equipment by a visual verification on the stud of the markings corresponding to his specific equipment. Thus, an electrical installer can quickly distinguish marking locations for electrical equipment from plumbing or other equipment.

Other features and advantages of the present invention will be apparent from the following more detailed description of the preferred embodiment, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a preferred stud of the present invention that includes markings only at relevant fixture locations;

- Fig. 2 is a magnified portion of the stud of Fig. 1, more clearly depicting the markings at relevant locations;
 - Fig. 3 is a stud of the present invention installed on a sill plate;
- Fig. 4 is a view of precut studs of the present invention installed between a sill plate and a top plate to form a wall; and
 - Fig. 5 is view of the wall of Fig. 4 with fixtures assembled at predetermined locations.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to Fig. 1, the studs 10 of the present invention are marked at specified points along the faces 14, 16 of the stud 10 during or shortly after the manufacturing stage, that is, sometime prior to the time when the various subcontractors will need to install their respective devices or service members, thereby obviating the need for subcontractors to manually measure and mark the required positions for the devices along the stud with a tape measure. The markings, shown in a magnified portion of the stud 10 of Fig. 1, may be on one or both of the faces 14, 16 of the stud that will be oriented outwardly towards the eventual wall surface and may extend partially or completely onto one or both of the side surfaces 30, 32, or may be placed solely on one or both side surfaces 30, 32. For example, on a nominal wooden 2x4 stud having a height or length of 8 feet, the markings can be on one or both of the faces that are nominally 2" wide. Furthermore, the markings on the stud, preferably along the faces 14, 16, can be baselined from either or both ends 11, 12 of the stud, as shown

in Fig. 1 which depicts the face markings baselined from either end 11, 12. As used herein, the term "baselined" means the point from which a sequence of markings begins at a stud end, which does not necessarily correspond to a "0" measurement for the markings. Referring now to Fig. 3, when baselined from both ends of stud 10, the markings indicative of a position can be read directly from the stud no matter which end of the stud is installed on a base plate or sill plate, so that the installer of the stud does not have to worry about positioning the stud in an "upright" position. Rather, because the markings will run from a first end of a stud along a face or side, and from a second end of the stud along the same face or side but in an opposite direction, so that equivalent markings can be read when the stud is installed "right-side up" or "upside down", it is impossible for the stud to be positioned between top plates or upper (ceiling) studs and sill plates 20 or lower (floor) horizontal studs in a manner which would prevent utilization of the markings on the stud. Further, in the preferred embodiment, because the markings will be on opposed faces of the stud, one of which typically ends up as a support surface for wall installation by attachment of drywall, paneling or some other similar wall structure unit, it is impossible for the stud to be arranged in a manner which would make the markings inaccessible or otherwise not available for proper use.

With regard to electrical outlets, an electrical contractor positions electrical outlets in electrical boxes at each of the locations where an electrical service member is required, such as an electrical receptacle for plugging in a lamp, a light switch, a control knob for an audio/visual device, etc. Fig. 4 depicts precut vertical studs installed between a sill plate 20 and a top plate 40 over a subfloor 42 mounted on subfloor joists 44 as a wall unit. Fig. 5 depicts the wall unit of Fig. 4 with electrical boxes 50 assembled to vertical studs 10 at

location 24. These boxes 50 are typically located by nailing or otherwise fastening them to one of the vertical studs at the desired location where the service member is to be positioned.

The various heights and other measurements for the markings described in this disclosure are given in inches. Any other units of measurement, such as metric units, are deemed to be within the scope of the present invention, to the extent that the other systems of measurement, when converted to inches, correspond to the various measurements and ranges of measurements set forth herein. Further, when it is stated that a particular service member is located a certain distance above the subfloor, this indicates the distance from the subfloor to the bottom edge of the service member, as shown in Fig. 5. For a wooden stud, this value is about 1-½", but may be a different value for metal or plastic studs. Each corresponding visible marking is made on the stud at a preselected distance that includes the thickness of a sill plate and extends between the intersections of the faces and sides. When the visible marking additionally includes a numeral associated with the marking extending to the aforesaid intersection, the numeral will indicate a distance measurement that includes the thickness of the sill plate and is not indicative of the measurement of the distance along the stud from the end. Thus, this numeric value is offset by the value of the thickness of the sill plate member as shown in Fig. 5.

Electrical outlets can be positioned anywhere, including from on the actual floor itself, as well as anywhere on the wall from the floor up to 78" from the floor. But the measurements are usually derived from the subfloor, with the subfloor being the origin or "0" as shown in Fig. 5. The standards for locations are current industry standards as practiced by builders in accordance with widely accepted codes. This invention recognizes that standards and codes may change in the future, and that standards will differ from country to country or

locality to locality. The ranges and locations set forth herein are based on current standards and codes and are not meant to be limiting. However, as the standards and codes are modified, the preapplied markings on the studs can also be changed to account for such modifications. Typically, an electrical outlet 50 is located between about 9" and 21"from the subfloor, and typically at about 15", Fig. 3, item 24, from the subfloor. An electrical outlet for a bathroom, such as an outlet located in proximity to a sink, is located between about 36" and 48", typically about 42" above the subfloor indicated as 52 in Fig. 5. An electrical outlet for a counter top, such as in the kitchen, or for a workbench or a wet bar, indicated as 54 in Fig. 5, is located between about 39" to 51" typically 45" above the subfloor. For wall sconces or other types of wall fixtures, electrical outlets are located between about 60" and 72", and typically about 66" above the subfloor Electrical boxes for light switches are located between about 42" and 54, typically about 48" above the subfloor, indicated as 56 in Fig. 5.

Usually, other subcontractors will follow or align their service members to correspond with the service members that have previously been installed by other subcontractors. For example, if the electrical contractor is the first subcontractor to hang service members, a heating and cooling subcontractor may be the next to install service members. In such a scenario, the heating and cooling subcontractor must locate air flow return members 60, 62 in Fig. 5, throughout the house in pairs, one return in proximity to the floor and another return directly above that floor return in proximity to the ceiling. See Figs. 1 and 2. If the electrical contractor has located electrical outlet boxes at 15" from the subfloor, the heating and cooling subcontractor should locate the bottom edge of the one of the air flow return members at 15" from the subfloor, so as to correspond with the distance from the floor of the outlet box. In this way, the result of having all service members aligned with one another will present a

visually pleasing appearance. The upper air flow return member is then located at a distance from the ceiling which is equal to the distance between the lower air flow return member and the floor (in the example, 15"). This positioning again results in a symmetrical, visually appealing presentation.

Other service members would similarly be located to correspond to previously-installed service members. For example, if the dwelling possesses a security system, the security key pad which controls the operation of the system would be positioned along the wall somewhere in the dwelling, at a height from the subfloor that would correspond to the distance between the subfloor and any light switches that may be present in the room in question. A control knob (such as for a audio/visual system, or a light dimmer) would be located at the same height as light switches.

Plumbing contractors will also benefit from the studs of the present invention.

Certain plumbing fixtures are typically located at relatively uniform distances from the subfloor. For example, a waterline exit behind a toilet fixture may be located approximately 6" or 9", depending on the height of the base trim, above the subfloor or within a few inches of these distances. Waste and waterline exits in a kitchen or in a bathroom, such as for a sink, may be located approximately 19" or 22" respectively above the subfloor, or within a few inches of these distances. The plumbing lines, in order to allow for the proper flow of waste be installed within the walls on a slight decline so as to allow waste to flow in a downward direction assisted by gravity. These lines are connected to the fixture, through the wall, and then usually wye or tee to pipes leading to (or away from) the fixture. Holes are drilled in the various vertical studs through which a particular line runs. If the studs are spaced approximately 12" to 16" from one another, the holes must be drilled so that the pipe will

decrease in height approximately ¼-inch per stud, that is to say, the slope of the pipe will have a slope measured by a ¼-inch vertical drop every 16" of horizontal run, as the plumber sets the exit line running away from the fixture. The markings on the studs of the present invention will assist the plumbing contractor not only in easily measuring for the location of service members, but also will allow for faster drilling of the necessary holes in each of the studs through which the plumbing line runs.

In the preferred embodiment of the present invention, the studs are marked at some point prior to their actual installation in the dwelling. Preferably, the studs are provided with the markings of the present invention when they are manufactured. For example, precut studs are marked preferably are marked by the mill that cuts them to 92-5/8" in height. However, the entity performing the marking is not critical; however, the advantage of the present invention is obtained by relieving the various subcontractors from the time-consuming task of measuring or hand-marking studs in order to install their respective service members, thereby allowing them to increase their productivity and reduce the time required to perform installations. The measurements that they will require already will have been premarked on the studs, and therefore the service members can simply be installed at (or near) those markings.

The preferred stud of the present invention has one mark somewhere within each of the following ranges (all of which are in reference to the distance from the subfloor, parenthetical measurements indicate the distance of the marking from the end of the stud or member): 3" to 9"; 6" to 12"; 9" to 21"; 16" to 22"; 19" to 25"; 36" to 48"; 39" to 51"; 42" to 54"; 60" to 72" and $76-\frac{1}{2}$ to $88-\frac{1}{2}$ ". Preferably the stud has at least two markings, one at about 14" to 16" $(12-\frac{1}{2}$ " to $14-\frac{1}{2}$ ") and a second at about 47" to 49" $(45-\frac{1}{2}$ " to $47-\frac{1}{2}$ ").

Optional additional markings can be included, each additional marking located between about 5" to 7" (3-½" to 5-½"), about 8" to 10" (6 ½" to 8 ½"), about 18" to 20" (16 ½" to 18 ½"), about 21" to 23" (19-½" to 21-½"), about 41" to 43" (39-½" to 41-½"), about 44" to 46" (42-½" to 44-½"), about 65" to 67" (63-½" to 65-½"), and about 81-½" to 83-½" (80" to 82"). More preferably, the stude of the present invention have one mark at each of the following locations (all of which are in reference to the distance from the subfloor): about 6"; about 9"; about 15"; about 19"; about 22"; about 42"; about 45"; about 48"; about 66" and about 82-½". Because these distances are baselined from the subfloor, the markings will actually be located along the stud from a stud end at 4-½", 7-½", 13-½",17-½", 20-½", 40-½", 43-½", 46-½" 64-½" and 81".

Markings may also be added to accommodate people with disabilities or handicapped-suitable dwellings. For example, the ADA requires that certain service members be located at preselected heights no higher than 36" from the floor which do not correspond to the standard heights used in non-handicapped-suitable dwellings.

The markings may be made by any suitable method, such as ink-stamping, indenting, piercing, or other means. Additional identifying insignia may be provided indicative of the type of installation required at a specified height. The identifying insignia may include one or more of the following: symbols, different colors, measurement numbers, etc. In a preferred embodiment, electrical markings are color-coded red or orange, and are marked as 15", 36", 42", 45", 48" and 66", indicative of the distance from the subfloor, but marked along the stud at 13-½", 34-½", 40-½", 43-½", 46-½" and 64-½". Plumbing markings are color-coded in blue, representative of water, and are marked as 6," 9", 19", 22", indicative of distance from the subfloor, but marked along the stud at 4-½", 7-½", 17-½", and 20-½". Carpenter's

markings are in green. There is one carpenter's marking marked as 82-1/2", indicative of distance from the subfloor, but marked along the stud at 81", 23 in Fig. 5. Because a subcontractor or one of its workers may be color-blind, making it impossible to distinguish the colors associated with the measurement numbers, a symbol indicative of the type of fixture may be added to supplement identification of the number with the appropriate type of fixture. While any variety of symbols may be added, for example, * associated with plumbing and \$ associated with electrical, in a one embodiment, a wave symbol ~, indicative of water is added in proximity to the markings for plumbing fixtures, and a nail head indicative of a carpenter's position is added in proximity to the markings for the carpenter, most preferably before and/or after the numeric marking, while an optional lightning bolt can be added in proximity to the markings for electrical fixtures, most preferably symbol before and/or after the digital marking. In the preferred embodiment, no symbol is provided for the electrical markings other than an optional straight line, and a nail head symbol is provided at 82-1/2" (81") representative of the position of the door header. These additional markings and colors provide more information regarding the various markings and/or otherwise distinguish the markings from one another, making the stud even easier to use. Identical markings should be presented both right-side-up and upside-down.

The markings should be no more than needed to accommodate the needs of the majority of subcontractors. When too many markings are present on the stud (such as at every inch or half-inch), or when a linear scale is applied to the stud with gradation markings, the stud becomes too cluttered and is difficult to work with. Such a stud becomes unworkable when cut, rendering all of the markings meaningless. Further, customized homes, having service members located at very unique heights (such as for a very tall person)

are difficult to accommodate, as such measurements could vary dramatically from house to house. The studs of the present invention can still be used in such situations, however, because if there is a premarking at, for example, 45" from the subfloor, and the particular dwelling requires the location of a certain service member at 51", the subcontractor simply needs to measure 6" from the 45-inch premark, rather than having to measure 51" from the subfloor, or apply a 6" template. In this manner, the studs of the present invention can reduce the number of times that an individual must bend up and down to make the numerous measurements and markings that, prior to this invention, had to be made by hand.

The studs of the present invention may be used in any structure, including, but not limited to, residential, commercial and industrial. Studs may be designed for each of these various applications in order to accommodate the heights which are traditionally used in those situations.

Although the present invention has been described in connection with specific examples and embodiments, those skilled in the art will recognize that the present invention is capable of other variations and modifications within its scope. These examples and embodiments are intended as typical of, rather than in any way limiting on, the scope of the present invention as presented in the appended claims.

CLAIMS

What is claimed is:

1.

a framing member of preselected length for use in the assembly of a wall, the member having a first face and a second face opposite the first face and at least one pair of parallel

A framing product, for use in the assembly of a wall in a building, comprising:

side surfaces at right angles to the first and second faces, the faces and side surfaces extending

along the preselected length;

a plurality of premarked visible markings on the faces or side surfaces of the member at preselected locations along the length, each premarked marking located at a standard height above a subfloor of the building for installation of a fixture; and

wherein the framing member is substantially free of additional, premarked extraneous markings used for measurements.

- 2. The framing member of claim 1 wherein each of the visible markings is on at least one face of the member and includes numerals indicative of the standard height of the markings above a subfloor, so that each distance measured along the frame member from an end to the numeral is offset by a preselected dimension corresponding to a thickness of a sill plate member upon which the framing member is mounted.
- 3. The framing member of claim 1 wherein the premarked visible markings further include a color indicative of a type of installation performed at each premarked marking.
- 4. The framing member of claim 3 wherein the color indicative of an electrical fixture installation is red.
- 5. The framing member of claim 3 wherein the color indicative of a plumbing fixture installation is blue.

6. The framing member of claim 3 wherein the color indicative of a carpentry installation is green.

- 7. The framing member of claim 1 wherein the premarked visible markings further include a symbol indicative of the type of installation performed at each premarked marking.
- 8. The framing member of claim 7 wherein the premarked symbol indicative of an electrical installation is a lightning bolt.
- 9. The framing member of claim 7 wherein the premarked symbol indicative of a plumbing installation is a wave.
- 10. The framing member of claim 1 wherein the framing member is comprised of a construction material selected from the group consisting of steel, composite, wood and plastic.
 - 11. A framing product, for use in the assembly of a wall in a building, comprising:
- a framing member of preselected length having a first end and a second end for use in the assembly of a wall, the member further having a first face and a second face opposite the first face and a pair of parallel side surfaces at right angles to the first and second faces, the faces and the sides extending along the preselected length, the sides and the faces forming a cross-section of the member with the sides having a larger dimension than the faces;
- a first set of premarked visible markings on both faces of the member at preselected locations along its length, the first set of premarked visible markings baselined from the first end of the member, each premarked marking located at a standard height above a subfloor origin for installation of a fixture;
- a second set of premarked visible markings on both faces of the member at preselected locations, the second set of premarked visible markings baselined from the second end of the

member, each premarked marking located at a standard height above the subfloor origin for installation of a fixture, so that use of the premarked visible markings is independent of the end of the framing member installed on the subfloor; and

wherein the framing member is substantially free of additional, premarked markings.

- 12. The framing member of claim 11 wherein each of the visible markings on each face of the members include a numeral indicative of the standard height of the marking above the subfloor origin, so that each numeral corresponds to a distance measured along the frame member when the distance is increased by a thickness of a sill plate member.
- 13. The framing member of claim 1 wherein the premarked visible markings further include a color indicative of a type of installation performed at each premarked marking.
- 14. The framing product of claim 13 wherein the color indicative of an electrical fixture installation is red.
- 15. The framing product of claim 13 wherein the color indicative of a plumbing fixture installation is blue.
- 16. The framing product of claim 13 wherein the color indicative of a carpentry installation is green.
- 17. The framing product of claim 11 wherein the premarked visible markings further include a symbol indicative of the type of installation performed at each premarked marking.
- 18. The framing product of claim 17 wherein the premarked symbol indicative of an electrical installation is a lightning bolt.
- 19. The framing product of claim 17 wherein the premarked symbol indicative of a plumbing installation is a wave.
 - 20. A wooden framing product, for use in the assembly of a wall in a building,

comprising:

a wooden stud of preselected length having a first end and a second end for use in the assembly of a wall, the stud further having a first face and a second face opposite the first face and a pair of parallel side surfaces at right angles to the first and second faces, the faces and the side surfaces extending along the preselected length, the side surfaces and the faces forming a cross-section of the stud with the side surfaces having a larger dimension than the faces;

a first set of premarked visible markings on both faces or side surfaces of the stud at preselected locations along its length, the first set of premarked visible markings baselined from the first end of the stud, each premarked marking located at a standard height above a subfloor origin for installation of a fixture;

a second set of premarked visible markings on both faces or side surfaces of the stud at preselected locations along its length, the second set of premarked visible markings baselined from the second end of the stud, each premarked marking located at a standard height above the subfloor origin for installation of a fixture, so that use of the premarked visible markings is independent of the position of the framing member on installation in the wall assembly; and

wherein the stud is substantially free of additional, premarked markings not related to fixture installations.

- 21. The wooden framing product of claim 20 wherein the visible markings on each face of the stud include numerals indicative of a standard height above the subfloor origin, so that each numeral is offset from a distance measured along the stud by about $1-\frac{1}{2}$, corresponding to a thickness of a sill plate member
 - 22. The wooden framing product of claim 21 wherein the numerals included on each

face of the stud are 3" to 9" located at 1-½" to 7-½" along the face from a corresponding end, 9" to 21", located at 7-½" to 19-½" along the face from a corresponding end, 16" to 22" located at 14-½" to 20-½" along the face from a corresponding end, 19" to 25", located at 17-½" to 23-½" along the face from a corresponding end, 36" to 48" located at 34-½" to 46-½" along the face from a corresponding end, 39" to 51" located at 37-½" to 49-½" along the face from a corresponding end, 42" to 54" located at 40-½" to 52-½" along the face from a corresponding end, 60" to 72" located at 58-½" to 70-½" along the face from a corresponding end, and 76-½" to 88-½" located at 75" to 87" along the face from a corresponding end.

- 23. The wooden framing product of claim 21 wherein the numerals included on each face of the stud from the subfloor origin are about 6", about 9", about 15", about 19", about 22", about 36", about 42", about 45", about 48", about 66" and about 82-½" located at positions measured from the corresponding stud end at about 4-½", 7-½", 13-½", 17-½", 20-½", 34-½", 40-½", 43-½", 46-½", 64-½" and 81".
- 24. The wooden framing product of claim 23 wherein the premarked visible markings further include a color indicative of the type of installation performed at each premarked marking.
- 25. The framing product of claim 24 wherein the color of premarked visible markings at about 15", 36", 42", 45", 48" and 66" from the subfloor origin are red, indicative of an electrical fixture installation.
- 26. The framing product of claim 24 wherein the color of premarked visible markings at about 6", 9", 19", and 22" from the subfloor origin are blue, indicative of a plumbing fixture installation.
 - 27. The framing product of claim 24 wherein the color of premarked visible markings

at about 82-1/2" is green, indicative of a carpentry installation.

28. The framing product of claim 23 wherein the premarked visible markings further include a symbol indicative of the type of installation performed at each premarked marking.

- 29. The framing product of claim 28 wherein the premarked visible markings from the subfloor origin of 15", 36", 42", 45", 48" and 66" further include a premarked lightning bolt symbol indicative of an electrical installation.
- 30. The framing product of claim 28 wherein the premarked visible markings from the subfloor origin of 6", 9", 19", and 22" further include a premarked wave symbol indicative of a plumbing installation.
- 31. The framing product of claim 28 wherein the premarked visible marking from the subfloor origin at 82-1/2" further include a premarked nail head symbol indicative of an carpentry installation.
 - 32. A framing product, for use in the assembly of a wall in a building, comprising:

a framing member of preselected length for use in the assembly of a wall, the member having a first face and a second face opposite the first face and at least one pair of parallel side surfaces at right angles to the first and second faces, the faces and side surfaces extending along the preselected length;

at least two premarked visible markings on the face or side surfaces of the member at preselected locations along the length, each premarked marking located at a standard height above a subfloor origin for installation of a fixture; and

wherein the framing member is substantially free of additional, premarked extraneous markings used for measurements.

33. The framing product of claim 32 wherein the at least two preselected visible

markings are positioned at preselected locations, the first visible marking positioned between about $12-\frac{1}{2}$ " and $14-\frac{1}{2}$ " along the length of the member from an end, and the second visible marking positioned between about $45-\frac{1}{2}$ " and $47-\frac{1}{2}$ " along the length from the end of the member.

- 34. The framing product of claim 33 wherein the first preselected visible marking is positioned at about 13-½" and the second preselected visible marking is positioned at about 46-½" from the end of the member, corresponding to about 15" and 48" above the subfloor origin.
- 35. The framing product of claim 32 wherein the at least two preselected visible markings are positioned at preselected locations, the first visible marking positioned between about 12-½" and 14-½" along the length of the member from an end, the second visible marking positioned between about 45-½" and 47-½" along the length from the end of the member, the member further including at least one additional visible marking positioned along the length of the member from an end at about 3-½" to 5-½", about 6-½" to 8-½", about 16-½" to 18-½", about 19-½" to 21-½", about 39-½" to 41-½", about 42-½" to 44-½", about 63-½" to 65-½", and about 80" to 82".

