SECTION 06 17 00

ENGINEERED FRAMING SYSTEMS

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\*\* NOTE TO SPECIFIER \*\* PreBuck; Treated LSL Engineered Framing Systems.  
This section is based on the products of PreBuck, which is located at:  
2555 28th St. SW  
Wyoming, MI 49519  
Tel: 616-309-6256  
Email: [request info (brett@prebuckproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=PreBuck&coid=49389&rep=&fax=&message=RE:%20Spec%20Question%20(06170pef):%20%20&mf=)  
Web: <http://www.prebuckproducts.com>   
 [ [Click Here](https://www.arcat.com/arcatcos/cos49/arc49389.html) ] for additional information.  
A new era has arrived. A construction revolution: strength and quality combined with speed and efficiency. PreBuck technology now offers the fastest, smartest and strongest construction solutions available today. Save time and money while building superior durability into every project.  
PreBuck innovations for insulated concrete forming (ICF), tilt-up, cast-in-place, and cinderblock (CMU) applications are unprecedented within the industry and custom manufactured to design specifications.  
Specifically designed for direct contact with concrete and non-corrosive to metals, PreBuck products feature Strandguard (LSL) engineered lumber treated with zinc borate for exceptional resistance to insects and decay. PreBuck products also feature MDI resin, the 100% waterproof bonding agent that turns to a durable plastic when cured.  
Combining these quality components with PreBuck's advanced engineering and you're guaranteed the most efficient, cost savings and time savings construction technology available today.

1. GENERAL
   1. SECTION INCLUDES
      1. Engineered lumber framing systems for the following applications:
         1. Parapet cap engineered framing system.
         2. Window and door buck engineered framing system.
         3. Top and sill plate engineered framing system.
   2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
    2. Section 05 40 00 - Cold-Formed Metal Framing.
    3. Section 06 10 00 - Rough Carpentry
    4. Section 07 50 00 - Membrane Roofing.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not required by the text of the edited section.

* + 1. American Wood Protection Association (AWPA):
       1. AWPA U1-15, UC2 Interior/Damp Use.
    2. ASTM International (ASTM):
       1. ASTM E 518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus. (R-Value).
    3. ICC Evaluation Service:
       1. ICC-ES Report ESR-1387 -StrandGuard TimberStrand LSL 1.30E treated with zinc borate.
    4. NAHB Research Center:
       1. Green Approved Product for National Green Building Certification, Certificate 00008.
  1. SUBMITTALS
     1. Submit in accordance with Section 01 30 00 - Administrative Requirements.
     2. Product Data: Submit manufacturer's current published data including materials, standard details, and installation instructions.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Minimum 5 years experience manufacturing similar products.
     2. AWPA Standards: Materials shall meet AWPA U1-15 for Use Category UC 2. Service conditions for UC2 are interior construction, above ground, damp; protected from weather, but may be subject to sources of moisture.
     3. NAHB Green Approved Product: Materials shall be NAHB Green Approved; StrandGuard TimberStrand LSL is an Green Approved Product for National Green Building Certification, Certificate 00008.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Deliver, store and handle materials in accordance with manufacturer's recommendations and as required to avoid damage.
  4. PROJECT CONDITIONS
     1. Maintain temperature and humidity within limits recommended by the manufacturer. Do not install products under environmental conditions outside manufacturer's recommended limits.
  5. WARRANTY
     1. Warranty: Provide manufacturer's standard limited warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: PreBuck, which is located at: 2555 28th St. SW; Wyoming, MI 49519; Tel: 616-309-6256; Email: [request info (brett@prebuckproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=PreBuck&coid=49389&rep=&fax=&message=RE:%20Spec%20Question%20(06170pef):%20%20&mf=); Web: <http://www.prebuckproducts.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of the General Conditions and Division 01.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. PARAPET CAP ENGINEERED FRAMING SYSTEM
     1. Parapet Cap Engineered Framing System: StrandGuard TimberStrand LSL 1.30E Engineered Lumber by PreBuck Engineered Framing Systems.
        1. Meets AWPA U1-15 for Use Category 2 (UC2).
        2. NAHB Research Center Green Approved.
        3. MDI resin, 100 percent waterproof when cured.
        4. Treated with zinc borate through complete cross section.
        5. Typical material 1-1/2 inches (38 mm) thick; built-up as required.
        6. Round 1-1/4 inch counter sunk anchor openings at 24 inches O.C.
        7. Acceptable for direct contact with concrete, non-corrosive to metals, insect and fungi resistive.
        8. Materials: StrandGuard TimberStrand LSL 1.30E Engineered Lumber, ICC ESR-1387.
           1. Treatment: Zinc borate through complete cross section.
           2. Bending Strength: 1900 psi.
           3. Tensile Strength: 1075 psi.
           4. Shear Strength: 150 psi.
           5. Compression - Perpendicular to Grain: 670 psi.
           6. Specific Gravity: 0.50 into the face, 0.42 into the edge.
           7. R-value of 1-1/2 inch thickness (ASTM E 518): 1.86.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. WINDOW AND DOOR BUCK ENGINEERED FRAMING SYSTEM
     1. Window and Door Buck Engineered Framing System: StrandGuard TimberStrand LSL 1.30E Engineered Lumber by PreBuck Engineered Framing Systems.
        1. Meets AWPA U1-15 for Use Category 2 (UC2).
        2. NAHB Research Center Green Approved.
        3. MDI resin, 100 percent waterproof when cured.
        4. Treated with zinc borate through complete cross section.
        5. Typical material 1-1/2 inches (38 mm) thick; built-up as required.
        6. Metal flange, 1-1/2 inch (38 mm) x 1-1/2 inch (38 mm), 20 gauge galvanized metal as applicable.
        7. Fasteners, 3-4 16D nails, minimum, each corner.
        8. Two continuous dovetail keyways at entire perimeter to eliminate air infiltration.
        9. Non-obstructive with insulated concrete forming (ICF) web.
        10. Unit self-aligns on wall.
        11. Acceptable for direct contact with concrete, non-corrosive to metals, insect and fungi resistive.
        12. Materials: StrandGuard TimberStrand LSL 1.30E Engineered Lumber, ICC ESR-1387.
            1. Treatment: Zinc borate through complete cross section.
            2. Bending Strength: 1900 psi.
            3. Tensile Strength: 1075 psi.
            4. Shear Strength: 150 psi.
            5. Compression - Perpendicular to Grain: 670 psi.
            6. Specific Gravity: 0.50 into the face, 0.42 into the edge.
            7. R-value of 1-1/2 inch thickness (ASTM E 518): 1.86.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. TOP AND SILL PLATE ENGINEERED FRAMING SYSTEM
     1. Top and Sill Plate Engineered Framing System: StrandGuard TimberStrand LSL 1.30E Engineered Lumber by PreBuck Engineered Framing Systems.
        1. Meets AWPA U1-15 for Use Category 2 (UC2).
        2. NAHB Research Center Green Approved.
        3. MDI resin, 100 percent waterproof when cured.
        4. Treated with zinc borate through complete cross section.
        5. Typical material 1-1/2 inches (38 mm) thick; built-up as required.
        6. Countersinking cutouts for bolts.
        7. Wet set system for anchoring sill plates while concrete is still wet.
        8. Acceptable for direct contact with concrete, non-corrosive to metals, insect and fungi resistive.
        9. Materials: StrandGuard TimberStrand LSL 1.30E Engineered Lumber, ICC ESR-1387.
           1. Treatment: Zinc borate through complete cross section.
           2. Bending Strength: 1900 psi.
           3. Tensile Strength: 1075 psi.
           4. Shear Strength: 150 psi.
           5. Compression - Perpendicular to Grain: 670 psi.
           6. Specific Gravity: 0.50 into the face, 0.42 into the edge.
           7. R-value of 1-1/2 inch thickness (ASTM E 518): 1.86.

1. EXECUTION
   1. INSTALLATION
      1. Install materials in accordance with manufacturer's recommendations and in proper relationship with adjacent construction. Set members level, plumb, and true to line.
      2. Coordinate construction sequence with installation of flashings and adjacent materials provided by others to prevent exterior moisture from entering or passing through completed assemblies.
      3. Remove excess and waste materials from the job.

END OF SECTION