Building Supply List for Construction Information for a Stronger Home,
4th Edition
(Supply List Issued March 23, 2018)

Concrete

- 28-day compressive strength of concrete
  - 3000 pounds per square inch (psi)
  - 4000 psi

Masonry

- Provide normal weight, hollow, load bearing concrete masonry units (CMU) conforming to ASRM C90, Grade N, Type II with minimum compressive strength, f’m = 1500 psi

Mortar

- Type S in accordance with ASTM C270

Grout

- Grout for masonry in accordance with ASTM C476 with minimum 28 day compressive strength of 2,000 psi

Steel Reinforcing Bars, Horizontal Joint Reinforcement, and Welded Wire Mesh

- Reinforcing steel shall conform to ASTM A615, Grade 60
- Reinforcing bar sizes: #3, #4, #5, #6
- Horizontal Reinforcement: 9-gauge ladder mesh reinforcement, zinc coated complying with ASTM A82
- Welded Wire Fabric (Mesh) conforming to ASTM A185

Metal Roof Panels

- Corrugated metal roof panel ASTM A792 Grade 50-B (Aluminum Zinc Alloy) 24-gauge with 7/8” deep ribs at 2-2/3” on center

Wood Connectors

- Simpson Strong-Tie: H10A, HGA10KT, H11Z, MTS16, LTA2, HGAM10KTA, SP2, SP8, HGAM10, H2.5A, H3, SP4, MSTA36, LUS26, SPHR, GBC, MSTA24, HTT5, HDU2, CS16, A35, LTP4, MTS16, HD3B, LSTA18, MASA, H8, ABU, RPBZ, LSTA21, LSTHD8
- Tamlyn – RT2A, RT1, SPT4, TSA36
- USP – RT7A, RT12, SPT4, MSTA36, HGAM10, RT16M, LUSH26, MSTA24, RT16A, RTA7, HTT45, RS150, MP4F, MPA1, MTW16, LSTA18, TDX2, ICPL58, KNS1, PL4, FA3, RT8A, PAU, RPB, LSTA21, LSTHD8
- Universal Type:
  - 1-1/4” x 24” ridge strap x 18 gauge, galvanized
  - Rafter face mounted hangers, galvanized
Fasteners

- Fasteners shall be of *hot dipped zinc coated, G185, galvanized steel or stainless steel*. Bolts and lags screws shall conform to ANSI/ASME Standard B18.2.1, wood screws shall conform to B18.6.1. All bolts shall conform to ASTM A307 Grade A.

- Roofing Screws:
  - #14 x 2-1/2” long stainless steel self-driving roofing screw and minimum ½” diameter gasketed washer
  - #14 x 1” long stainless steel self-driving roofing screw with gasketed washer

- Specific Wood Screws:
  - #8 x 1 ¾ “long stainless steel wood screws
  - #10 x 2 ¾” long stainless-steel wood screws
  - #10 x 4” long stainless-steel wood screws
  - #12 x 2 ½” long stainless-steel screws
  - #12 x 3” long stainless-steel wood screws
  - #12 x 4-1/2” long stainless-steel wood screws
  - #14 x 3-1/2” long stainless-steel wood screws
  - #14 x 5” long stainless-steel wood screw

- The minimum strengths for lag screws and wood screws shall be as follows:

<table>
<thead>
<tr>
<th>Wood Screw Diameter (Inches)</th>
<th>Min. Bending yield strength (Psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.138 (#6)</td>
<td>100000</td>
</tr>
<tr>
<td>0.151 (#7)</td>
<td>90000</td>
</tr>
<tr>
<td>0.164 (#8)</td>
<td>90000</td>
</tr>
<tr>
<td>0.177 (#9)</td>
<td>90000</td>
</tr>
<tr>
<td>0.190 (#10)</td>
<td>80000</td>
</tr>
<tr>
<td>0.216 (#12)</td>
<td>80000</td>
</tr>
<tr>
<td>0.246 (#14)</td>
<td>70000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lag Screw Diameter (Inches)</th>
<th>Min. Bending yield strength (Psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4”</td>
<td>70000</td>
</tr>
<tr>
<td>5/16”</td>
<td>60000</td>
</tr>
<tr>
<td>3/8” and greater</td>
<td>45000</td>
</tr>
</tbody>
</table>

- Simpson Titen HD anchors and Simpson Strong Drive SDWF Screws
Fasteners Continued

- Specific Nails: 10d
- Nails shall have the minimum properties specified in the table below and shall be stainless steel (Type 316) for exterior areas, and hot-dipped galvanized meeting ASTM A153 for contact with pressure treated wood:

<table>
<thead>
<tr>
<th>Nail Type</th>
<th>Shank Dia (Inches)</th>
<th>Min. Bending yield strength (Psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6d</td>
<td>0.113</td>
<td>100,000</td>
</tr>
<tr>
<td>8d</td>
<td>0.131</td>
<td>100,000</td>
</tr>
<tr>
<td>10d</td>
<td>0.148</td>
<td>90,000</td>
</tr>
<tr>
<td>12d</td>
<td>0.148</td>
<td>90,000</td>
</tr>
<tr>
<td>16d</td>
<td>0.162</td>
<td>90,000</td>
</tr>
<tr>
<td>20d</td>
<td>0.192</td>
<td>80,000</td>
</tr>
</tbody>
</table>

Sawn Lumber

- All sawn lumber shall conform to the American softwood lumber standard, PS20-15. Lumber shall be of the species and grade shown below. All lumber to be pressure treated.
- **Member Sizes**
  - 2x4, 2x6, 2x8, 2x10, 2x12, 2x14, 3x4, 3x6, 3x8, 3x10, 3x12, 3x14, 4x6, 4x8, 4x10, 4x12, 4x14
- **Grade**
  - Pressure treated: Southern Yellow Pine No. 1, Southern Yellow Pine No. 2, Douglas Fir No. 1, Douglas Fir No.2

Wood Structural Panels

- **Roof and Wall Sheathing**
  - All plywood to be APA rated, pressure treated, 5 ply plywood
    - Textured Plywood
      - Structural 1 Type 7/8” textured plywood with 48/24 span rating
      - Structural 1 Type 23/32” textured plywood with 32/16 span rating
      - Structural 1 Type 3/4” textured plywood with 40/20 span rating
    - Regular Plywood
      - Structural 1 Type 5/8” plywood with 32/16 rating
      - Structural 1 Type 15/32” plywood with 32/16 rating
      - ¼” plywood

- **Floor Sheathing**
  - Floor sheathing shall be tongue, and groove APA rated pressure treated 5 ply 3/4 ” plywood sheathing with Min. 48/24 span rating
Glue laminated members

- The minimum glue laminated timber grade shall be as follows and follow ANSI/AITC Standard A190.1 and ASTM D3737:
  
  **Grade**
  
  24F-V4
  
  24F-V8

Composite members

- The material type and grade shall be as follows in accordance with ASTM D5456:

<table>
<thead>
<tr>
<th>Members</th>
<th>Type</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LSL</td>
<td>E = 1550000 Psi, Fb = 2325 Psi</td>
</tr>
<tr>
<td>Beam</td>
<td>LVL</td>
<td>E = 1900000 Psi, Fb = 2600 Psi</td>
</tr>
<tr>
<td>PSL</td>
<td></td>
<td>E = 2000000 Psi, Fb = 2900 Psi</td>
</tr>
<tr>
<td>LSL</td>
<td>LVL</td>
<td>E = 1300000 Psi, Fb = 1700 Psi, Fcll = 1400 Psi</td>
</tr>
<tr>
<td>Post</td>
<td>LVL</td>
<td>E = 1800000 Psi, Fb = 2400 Psi, Fcll = 2500 Psi</td>
</tr>
</tbody>
</table>

Windows & Shutters

- Types of Shutters: Colonial Shutter, Bahama Shutter, Roll-up Shutter, Accordion Shutter to resist basic wind speeds of 165 mph
- Windows with impact resistant glazing to resist basic wind speeds of 165 mph in accordance with ASTM E1886 and ASTM E1996

Roof Insulation

- 24” wide x 1-1/2” thick expanded molded polystyrene
- 24” wide x 1-1/2” thick extruded polystyrene