

***Building Supply List for Construction Information for a Stronger Home,  
4<sup>th</sup> 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 1/2" diameter gasketed washer
  - #14 x 1" long stainless steel self-driving roofing screw with gasketed washer
- Specific Wood Screws:
  - #8 x 1 1/4 "long stainless steel wood screws
  - #10 x 2 3/4" long stainless-steel wood screws
  - #10 x 4" long stainless-steel wood screws
  - #12 x 2 1/2" 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:

<b>Wood Screw Diameter (Inches)</b>	<b>Min. Bending yield strength (Psi)</b>
0.138 (#6)	100000
0.151 (#7)	90000
0.164 (#8)	90000
0.177 (#9)	90000
0.190 (#10)	80000
0.216 (#12)	80000
0.246 (#14)	70000
<b>Lag Screw Diameter (Inches)</b>	<b>Min. Bending yield strength (Psi)</b>
1/4 "	70000
5/16"	60000
3/8" and greater	45000

- 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:

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

### **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
    - 1/4" 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:

Members	Type	Grade
	LSL	E = 1550000 Psi, Fb = 2325 Psi
Beam	LVL	E = 1900000 Psi, Fb = 2600 Psi
	PSL	E = 2000000 Psi, Fb = 2900 Psi
	LSL	E = 1300000 Psi, Fb = 1700 Psi, FcII = 1400 Psi
Post	LVL	E = 1800000 Psi, Fb = 2400 Psi, FcII = 2500 Psi

### **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