

## NAHB ESTIMATES OF WOOD IN A HOME

Below are the items from the 2015 [Builder Practices Survey](#) (BPS) conducted by [Home Innovation Research Labs](#) that NAHB used to estimate the amount of softwood lumber in a home. Among other things, the BPS produces material usage estimates for an average new single-family and average new multifamily home.

The BPS materials estimates do not directly specify lumber in board feet, but Home Innovation previously developed factors to convert BPS units to board feet and made these conversion factors available to NAHB. In a few cases, new conversion factors needed to be developed by Home Innovation, usually because of modifications to the BPS since the factors were last revised. A spreadsheet showing every conversion factor and how NAHB applied it is available from the NAHB Economics and Housing Policy Group on request.

EXTERIOR WALLS: Light Frame wood

- Dimension lumber
- Structural insulated panels
- Post & beam
- Logs

INTERIOR WALLS: Light Frame wood

- Dimension lumber

HEADERS (Window, Door, Fireplace, and Garage Door):

- Built-up dimension lumber
- Solid wood beams
- Glulam
- Wood I-joists -- single
- Wood I-joists -- doubled
- LVL -- single
- LVL -- doubled
- Parallam
- Glued & nailed box
- Wood truss
- LSL (Timberstrand, etc)
- Flitch plate beams

FLOOR LUMBER I-JOISTS

FLOOR OPEN WEB JOISTS

RIM BOARD FOR WOODEN I-JOISTS

- LSL (Timberstrand, etc)
- OSB
- Wooden I-joist with blocking
- Plywood
- Dimension lumber
- LVL
- Re-sawn glulam

## BEAMS

- Built-up dimension lumber
- Solid Lumber
- Glulam
- LVL
- Parallam
- LSL (Timberstrand, etc)
- Open web joist / Girder truss
- I-joist

## ROOF

- Structural Insulated Panels
- Beam & purlin

## ROOF RAFTERS

- Lumber
- I-joists

## ROOF TRUSS

- Lumber (standard)
- Lumber (raised heel or energy truss)
- I-joists

## TREATED WOOD SUBSTRUCTURE

- Deck
- Breezeway
- Front porch
- Side porch
- Screened-in porch

## PORCH MATERIAL

- Treated wood
- Cedar
- Redwood
- Other untreated wood

## WALKWAY MATERIAL

- Treated wood block

## PATIO MATERIAL

- Treated lumber
- Cedar
- Redwood
- Other untreated wood

## DECK MATERIAL

- Treated wood
- Cedar
- Redwood
- Other untreated wood

## WOOD FENCE -- VERTICAL BOARDS ON ALTERNATING SIDES

- Treated Wood
- Cedar
- Redwood
- Other untreated wood

WOOD FENCE -- VERTICAL BOARDS ON ONE SIDE

Treated wood

Cedar

Redwood

Other untreated wood

WOOD FENCE WITH HORIZONTAL RAILS / BOARDS

Treated wood

Cedar

Redwood

Other untreated wood

WIRE WITH WOOD POST FENCE

Treated wood

Cedar

Redwood

Other untreated wood

LANDSCAPE / RETAINING WALL

Treated landscape timbers

DECK RAILING

Treated wood

Cedar

Redwood

Other untreated wood

PORCH RAILING

Treated wood

Cedar

Redwood

Other untreated wood

BASEMENT WALL

Pressure treated wood

CRAWL SPACE WALL

Pressure treated wood

FLOOR SHEATHING - ALL FLOORS - WASTE INCLUDED

1 inch boards

2 inch boards

ROOF SHEATHING - WASTE INCLUDED

1 inch boards, no spacing

1 inch boards, spaced

2 inch boards (including T&G)

INTERIOR WALL FINISH (assume appearance grade untreated wood)

Lumber / Boards or shingles

INTERIOR CEILING FINISH (assume appearance grade untreated wood)

Lumber / Boards or shingles

FLOOR SHEATHING - ALL FLOORS - WASTE INCLUDED

Plywood

OSB

1 inch boards

2 inch boards

ROOF SHEATHING - WASTE INCLUDED

- Plywood
- OSB
- 1 inch boards, no spacing
- 1 inch boards, spaced
- 2 inch boards (including T&G)

WALL SHEATHING - WASTE INCLUDED

- Plywood
- OSB
- 1/2 inch fiberboard

UNDERLAYMENT MATERIAL

- Lauan plywood
- Other plywood
- OSB
- 1/4 inch hardboard

INTERIOR WALL FINISH

- Plywood paneling -- 1/4
- Hardboard paneling -- 1/4
- Lumber / Boards or shingles

INTERIOR CEILING FINISH

- Plywood paneling -- 1/4
- Hardboard paneling -- 1/4
- Lumber / Boards or shingles

ROOF MATERIAL WITH WASTE FACTORS

- Cedar shingles
- Cedar shakes

SIDING USE WITH WASTE FACTORS

- Plywood Panels
- Hardboard
- Cedar Shingles
- Cedar boards
- Redwood boards
- Other wood boards
- OSB
- Other wood-based siding

SOFFIT - EAVES

- Cedar boards
- Redwood boards
- Other wood boards
- Plywood / LVL
- Wood Fiber Composite

FASCIA - EAVES

- Cedar boards
- Redwood boards
- Other wood boards
- Plywood / LVL
- Wood Fiber Composite

For the following items, the amount of softwood was not estimated directly from the 2015 BPS. Home Innovation Research Labs last estimated the softwood embodied in these items as a whole in 2006. NAHB then made a simple adjustment to the 2006 estimates, based on the average percent change in the number of the items (in either the average single-family or average multifamily home) in the BPS between 2006 and 2015.

#### CABINET BOXES

- Wood veneer on particleboard / MDF

- Solid wood

- Plastic / Paper overlay / laminate on particleboard / MDF

- Plywood

#### CABINET DOORS

- Wood finish, raised panel in frame

- Wood finish, flat panel in frame

- Glass panel in wood frame

- Wood finish, flat panel with no frame

#### EXTERIOR DOORS

- Solid wood -- raised panel

- Wood -- flush

#### GARAGE DOORS

- Wood

#### INTERIOR PASSAGE DOORS

- Solid wood panel

- Solid wood louvered

- Solid wood with glass unit(s)

- Engineered wood or hardboard hollow core panel

- Engineered wood or hardboard hollow core flush

- Engineered wood or hardboard solid core panel

- Engineered wood or hardboard solid core flush

#### INTERIOR CLOSET DOORS

- Solid wood panel

- Solid wood louvered

- Solid wood with glass unit(s)

- Engineered wood or hardboard hollow core panel

- Engineered wood or hardboard hollow core flush

- Engineered wood or hardboard solid core panel

- Engineered wood or hardboard solid core flush

#### PATIO DOORS

- Wood (no cladding)

- Aluminum clad wood

- Vinyl clad wood

#### WINDOW OPENINGS

- Wood (no cladding)

- Wood, aluminum clad

- Wood, vinyl clad

#### WINDOW UNIT FRAMES

- Wood (no cladding)

- Wood, aluminum clad

- Wood, vinyl clad