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 | | 30.00 | | 12" Fiberglass Batt | |  | | 38.00 | | Fiberglass Blown (attic) | | 2.20-4.30 | |  | | Fiberglass Blown (wall) | | 3.70-4.30 | |  | | Rock Wool Batt | | 3.14-4.00 | |  | | Rock Wool Blown (attic) | | 3.10-4.00 | |  | | Rock Wool Blown (wall) | | 3.10-4.00 | |  | | Cellulose Blown (attic) | | 3.60-3.701 | |  | | Cellulose Blown (wall) | | 3.80-3.901 | |  | | Vermiculite | | 2.13 | |  | | Autoclaved Aerated Concrete | | 1.05 | |  | | Urea Terpolymer Foam | | 4.48 | |  | | Rigid Fiberglass (> 4lb/ft3) | | 4.00 | |  | | Expanded Polystyrene (beadboard) | | 4.00 | |  | | Extruded Polystyrene | | 5.00 | |  | | Polyurethane (foamed-in-place) | | 6.25 | |  | | Polyisocyanurate (foil-faced) | | 5.0-5.6 | |  | | **Construction Materials** | | | | | | Concrete Block 4" | |  | | 0.80 | | Concrete Block 8" | |  | | 1.11 | | Concrete Block 12" | |  | | 1.28 | | Brick 4" common | |  | | 0.80 | | Brick 4" face | |  | | 0.44 | | Poured Concrete | | 0.08 | |  | | Soft Wood Lumber | | 1.25 | |  | | 2" nominal (1 1/2") | |  | | 1.88 | | 2x4 (3 1/2") | |  | | 4.38 | | 2x6 (5 1/2") | |  | | 6.88 | | Cedar Logs and Lumber | | 1.33 | |  | | **Sheathing Materials** | | | | | | Plywood | | 1.25 | |  | | 1/4" | |  | | 0.31 | | 3/8" | |  | | 0.47 | | 1/2" | |  | | 0.63 | | 5/8" | |  | | 0.77 | | 3/4" | |  | | 0.94 | | Fiberboard | | 2.64 | |  | | 1/2" | |  | | 1.32 | | 25/32" | |  | | 2.06 | | Fiberglass (3/4") | |  | | 3.00 | | (1") | |  | | 4.00 | | (1 1/2") | |  | | 6.00 | | Extruded Polystyrene (3/4") | |  | | 3.75 | | (1") | |  | | 5.00 | | (1 1/2") | |  | | 7.50 | | Foil-faced Polyisocyanurate    (3/4") | |  | | 5.40 | | (1") | |  | | 7.20 | | (1 1/2") | |  | | 10.80 | | Building Paper | |  | | 0.06 | | **Siding Materials** | | | | | | Hardboard (1/2") | |  | | 0.34 | | Plywood (5/8") | |  | | 0.77 | | (3/4") | |  | | 0.93 | | Wood Bevel Lapped | |  | | 0.80 | | Aluminum, Steel, Vinyl    (hollow backed) | |  | | 0.61 | | (w/ 1/2" Insulating board) | |  | | 1.80 | | Brick 4" | |  | | 0.44 | | **Interior Finish Materials** | | | | | | Gypsum Board (drywall 1/2") | |  | | 0.45 | | (5/8") | |  | | 0.56 | | Paneling (3/8") | |  | | 0.47 | | **Flooring Materials** | | | | | | Plywood | | 1.25 | |  | | (3/4") | |  | | 0.93 | | Particle Board (underlayment) | | 1.31 | |  | | (5/8") | |  | | 0.82 | | Hardwood Flooring | | 0.91 | |  | | (3/4") | |  | | 0.68 | | Tile, Linoleum | |  | | 0.05 | | Carpet (fibrous pad) | |  | | 2.08 | | (rubber pad) | |  | | 1.23 | | **Roofing Materials** | | | | | | Asphalt Shingles | |  | | 0.44 | | Wood Shingles | |  | | 0.97 | | Ceramic Tile – ¼ in | |  | | 0.02 | | **Windows** | | | | | | Single Glass | |  | | 0.91 | | w/storm | |  | | 2.00 | | Double insulating glass    (3/16") air space | |  | | 1.61 | | (1/4" air space) | |  | | 1.69 | | (1/2" air space) | |  | | 2.04 | | (3/4" air space) | |  | | 2.38 | | (1/2" w/ Low-E 0.20) | |  | | 3.13 | | (w/ suspended film) | |  | | 2.77 | | (w/ 2 suspended films) | |  | | 3.85 | | (w/ suspended film and low-E) | |  | | 4.05 | | Triple insulating glass    (1/4" air spaces) | |  | | 2.56 | | (1/2" air spaces) | |  | | 3.23 | | Addition for tight fitting drapes or shades, or closed blinds | |  | | 0.29 | | **Doors** | |  | |  | | Wood Hollow Core Flush     (1 3/4") | |  | | 2.17 | | Solid Core Flush (1 3/4") | |  | | 3.03 | | Solid Core Flush (2 1/4") | |  | | 3.70 | | Panel Door w/ 7/16" Panels     (1 3/4") | |  | | 1.85 | | Storm Door (wood 50% glass) | |  | | 1.25 | | (metal) | |  | | 1.00 | | Metal Insulating     (2" w/ urethane) | |  | | 15.00 | | **Air Films** | | | | | | Summer | Interior Wall |  | 0.68 | | | Exterior Wall |  | 0.25 | | | Interior Ceiling Horizontal |  | 0.92 | | | Interior Ceiling 45° |  | 0.76 | | | Exterior Ceiling |  | 0.25 | | | Winter | Interior Wall |  | 0.68 | | | Exterior Wall |  | 0.17 | | | Interior Ceiling Horizontal |  | 0.61 | | | Interior Ceiling 45° |  | 0.62 | | | Exterior Ceiling |  | 0.17 | | | **Air Spaces** | | | | | | 1/2" to 4" approximately | |  | 1.00 | | | Aluminum foil facing air space | |  | 3.00 | | | |
| |  | | --- | | 1 [Measured Thermal Resistance of Cellulose Insulation Products Commercially Available in 2007](http://www.coloradoenergy.org/procorner/stuff/ASHRAE_R-Value_Report_Truncated.pdf) | |