

### e - values for different materials

#### Hardwood

|          |      |
|----------|------|
| alder    | 1.38 |
| ash      | 1.77 |
| beech    | 1.60 |
| birch    | 1.80 |
| cherry   | 1.50 |
| chestnut | 1.25 |
| elm      | 1.40 |
| locust   | 2.00 |
| maple    | 1.70 |
| oak      | 1.65 |
| poplar   | 1.58 |
| walnut   | 1.68 |

#### Softwood

|                   |      |
|-------------------|------|
| balsam fir        | 1.23 |
| cedar             | 1.19 |
| doug fir          | 1.95 |
| hemlock           | 1.40 |
| pine              | 1.40 |
| redwood           | 1.34 |
| old growth spruce | 1.40 |

#### Other

|                |       |
|----------------|-------|
| HDF            | 0.60  |
| MDF            | 0.50  |
| LDF            | 0.20  |
| temp hardboard | 0.80  |
| plywood        | 0.60  |
| brass          | 9.00  |
| aluminum       | 10.00 |
| bronze         | 14.00 |
| iron           | 28.00 |
| steel          | 30.00 |