

EPiC Database

The EPiC Database contains hybrid environmental flow coefficients for 89 main construction materials and products as well as a further 195 material variations. A total of 284 coefficients are provided across three environmental flows - energy, water and greenhouse gas emissions. The reported embodied energy coefficients are in *primary energy* terms, covering the entire energy supply chain.

Materials and products are grouped into eight broad categories:

- Concrete and plaster products
- Glass
- Insulation
- Metals
- Miscellaneous
- Plastics
- Sand, stone and ceramics
- Timber products

While the database does not contain an exhaustive list of materials, additional materials can be added, especially where process data in the form of environmental product declarations or life cycle inventories already exist, as further data becomes available, or new materials are developed.

This section provides a summary of all coefficients contained within the EPiC Database.

The full EPiC Database can be downloaded here: <https://doi.org/10.26188/5dc228ef98c5a>

EPiC

D a t a b a s e

| | | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) | |
|-------------------------------|----------|-----------------------------------|-----------------|--------------------|---|------|
| | | | (MJ) | | | |
| CONCRETE AND PLASTER PRODUCTS | Blocks | Concrete block | kg | 2.6 | 3.7 | 0.24 |
| | | 390 × 190 × 90 mm | no. | 24.3 | 34.2 | 2.2 |
| | | 390 × 190 × 140 mm | no. | 29.6 | 41.6 | 2.7 |
| | | 390 × 190 × 190 mm | no. | 35.2 | 49.4 | 3.2 |
| | Cement | Cement mortar | kg | 3.9 | 3.7 | 0.35 |
| | | Portland cement | kg | 11.8 | 7.8 | 1.3 |
| | Concrete | Autoclaved aerated concrete (AAC) | kg | 8.5 | 8.4 | 0.71 |
| | | Block - 600 × 200 × 100 mm | no. | 56.4 | 55.4 | 4.7 |
| | | Block - 600 × 200 × 150 mm | no. | 84.5 | 83.0 | 7.0 |
| | | Block - 600 × 200 × 200 mm | no. | 113 | 111 | 9.4 |
| | | 20 MPa | m ³ | 2 404 | 4 154 | 328 |
| | | 20 MPa - 30% fly ash | m ³ | 2 026 | 4 011 | 251 |
| | | 20 MPa - 30% GGBFS | m ³ | 2 186 | 4 034 | 263 |
| | | 25 MPa | m ³ | 2 581 | 4 196 | 361 |
| | | 25 MPa - 30% fly ash | m ³ | 2 241 | 4 028 | 277 |
| | | 25 MPa - 30% GGBFS | m ³ | 2 441 | 4 105 | 293 |
| | | 32 MPa | m ³ | 3 015 | 4 300 | 416 |
| | | 32 MPa - 30% fly ash | m ³ | 2 484 | 4 066 | 314 |
| | | 32 MPa - 30% GGBFS | m ³ | 2 704 | 4 103 | 331 |
| | | 40 MPa | m ³ | 3 476 | 4 355 | 497 |
| | | 40 MPa - 30% fly ash | m ³ | 2 854 | 4 075 | 373 |
| | | 40 MPa - 30% GGBFS | m ³ | 3 106 | 4 120 | 392 |
| | | 50 MPa | m ³ | 3 998 | 4 365 | 600 |
| | | 50 MPa - 30% fly ash | m ³ | 3 634 | 4 246 | 467 |
| | | 50 MPa - 30% GGBFS | m ³ | 3 958 | 4 325 | 492 |

| | | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|--------------------------------------|---------------------|--|-----------------|----------------------|--------------------|---|
| CONCRETE AND PLASTER PRODUCTS | Fibre cement | Sheet | kg | 18.3 | 19.8 | 1.6 |
| | | 4.5 mm | m ² | 119 | 129 | 10.2 |
| | | 6 mm | m ² | 159 | 172 | 13.5 |
| | | 7.5 mm | m ² | 198 | 214 | 16.9 |
| | | 18 mm | m ² | 475 | 514 | 40.6 |
| | | 24 mm | m ² | 634 | 686 | 54.2 |
| | | Weatherboard | kg | 26.0 | 31.3 | 2.2 |
| | | 205 × 7.5 mm - per m ² wall | m ² | 304 | 365 | 26.0 |
| | | 230 × 7.5 mm - per m ² wall | m ² | 284 | 341 | 24.2 |
| | | 300 × 7.5 mm - per m ² wall | m ² | 294 | 354 | 25.2 |
| | | 150 × 16 mm - per m ² wall | m ² | 549 | 660 | 46.9 |
| | | 180 × 16 mm - per m ² wall | m ² | 549 | 660 | 46.9 |
| | Plaster | Gypsum plaster | kg | 6.5 | 6.5 | 0.44 |
| | | Plasterboard - 10 mm | m ² | 86.1 | 85.6 | 5.8 |
| Plasterboard - 13 mm | | m ² | 95.7 | 97.9 | 6.5 | |
| Tiles | Concrete roof tile | kg | 4.3 | 5.7 | 0.39 | |
| GLASS | Flat glass | Single glazing | kg | 28.5 | 32.2 | 2.0 |
| | | 3 mm | m ² | 222 | 251 | 15.7 |
| | | 4 mm | m ² | 296 | 335 | 21.0 |
| | | 5 mm | m ² | 370 | 418 | 26.2 |
| | | 6 mm | m ² | 444 | 502 | 31.4 |
| | | 10 mm | m ² | 740 | 837 | 52.4 |
| | | 12 mm | m ² | 888 | 1 004 | 62.9 |
| | | Double glazing - 4:6:4 | m ² | 1 336 | 1 558 | 101 |
| | | Double glazing - 4:12:4 | m ² | 1 336 | 1 558 | 101 |
| | | Double glazing - 6:6:6 | m ² | 1 441 | 1 671 | 108 |
| Double glazing - 6:12:6 | m ² | 1 441 | 1 671 | 108 | | |

| GLASS | | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|-----------------|---------------------------|----------------|-----------------|----------------------|--------------------|---|
| | | | | | | |
| Laminated glass | Single glazing | kg | 36.4 | 59.7 | 2.8 | |
| | 6.38 mm | m ² | 604 | 991 | 46.8 | |
| | 8.38 mm | m ² | 794 | 1 302 | 61.4 | |
| | 10.38 mm | m ² | 983 | 1 613 | 76.1 | |
| | 12.38 mm | m ² | 1 172 | 1 923 | 90.7 | |
| Toughened glass | Single glazing | kg | 29.8 | 30.2 | 2.2 | |
| | 3 mm | m ² | 232 | 235 | 17.1 | |
| | 4 mm | m ² | 310 | 314 | 22.8 | |
| | 5 mm | m ² | 387 | 392 | 28.5 | |
| | 6 mm | m ² | 465 | 471 | 34.2 | |
| | 10 mm | m ² | 775 | 785 | 56.9 | |
| | 12 mm | m ² | 929 | 942 | 68.3 | |
| | Double glazing - 4:6:4 | m ² | 1 536 | 1 772 | 115 | |
| | Double glazing - 4:12:4 | m ² | 1 536 | 1 772 | 115 | |
| | Double glazing - 5:6:5 | m ² | 1 635 | 1 879 | 122 | |
| | Double glazing - 5:12:5 | m ² | 1 635 | 1 879 | 122 | |
| | Double glazing - 6:6:6 | m ² | 1 729 | 1 980 | 128 | |
| | Double glazing - 6:12:6 | m ² | 1 729 | 1 980 | 128 | |
| | Double glazing - 10:6:6 | m ² | 2 254 | 2 543 | 165 | |
| | Double glazing - 10:12:6 | m ² | 2 254 | 2 543 | 165 | |
| | Double glazing - 10:6:10 | m ² | 2 779 | 3 107 | 202 | |
| | Double glazing - 10:12:10 | m ² | 2 779 | 3 107 | 202 | |

| INSULATION | | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|--------------|-----------------------------------|----------------|-----------------|----------------------|--------------------|---|
| | | | | | | |
| Cellulose | General | kg | 12.1 | 20.5 | 0.79 | |
| | <i>Insulation - 80 mm (R2)</i> | m ² | 48.3 | 82.1 | 3.1 | |
| | <i>Insulation - 100 mm (R2.5)</i> | m ² | 60.3 | 103 | 3.9 | |
| Other | Aluminium foil insulation | m ² | 25.6 | 33.8 | 1.9 | |
| | Glasswool | kg | 57.5 | 40.7 | 4.0 | |
| | <i>Insulation - 80 mm (R2)</i> | m ² | 115 | 81.4 | 8.0 | |
| | <i>Insulation - 100 mm (R2.5)</i> | m ² | 144 | 102 | 10.1 | |
| | Rockwool | kg | 57.1 | 62.2 | 3.8 | |
| | <i>Insulation - 80 mm (R2)</i> | m ² | 320 | 348 | 21.1 | |
| | <i>Insulation - 100 mm (R2.5)</i> | m ² | 400 | 435 | 26.4 | |
| Polystyrene | Rigid foam (EPS/XPS) | kg | 155 | 841 | 8.0 | |
| | <i>Insulation - 72 mm (R2)</i> | m ² | 251 | 1 362 | 12.9 | |
| | <i>Insulation - 90 mm (R2.5)</i> | m ² | 314 | 1 703 | 16.2 | |
| Polyurethane | Rigid foam | kg | 293 | 690 | 17.5 | |
| | <i>Insulation - 44 mm (R2)</i> | m ² | 387 | 911 | 23.1 | |
| | <i>Insulation - 55 mm (R2.5)</i> | m ² | 484 | 1 138 | 28.8 | |

| METALS | Aluminium | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|--------|--|-----------------|-----------------|--------------------|---|
| | | | (MJ) | | |
| | Bar | kg | 345 | 219 | 29.6 |
| | <i>Flat - 12 mm × 3 mm</i> | m | 33.7 | 21.3 | 2.9 |
| | <i>Flat - 40 mm × 3 mm</i> | m | 112 | 71.2 | 9.6 |
| | <i>Flat - 100 mm × 6 mm</i> | m | 562 | 356 | 48.2 |
| | <i>Round - 16 mm dia.</i> | m | 188 | 119 | 16.2 |
| | <i>Round - 50 mm dia.</i> | m | 1 838 | 1 164 | 158 |
| | <i>Round - 150 mm dia.</i> | m | 16 542 | 10 479 | 1 420 |
| | Composite panel | m ² | 1 196 | 1 174 | 102 |
| | Extruded | kg | 358 | 182 | 29.4 |
| | <i>Round tube - 25 mm dia., 3.2 mm thick</i> | m | 114 | 57.9 | 9.4 |
| | <i>Round tube - 60 mm dia., 10 mm thick</i> | m | 871 | 442 | 71.5 |
| | <i>Round tube - 80 mm dia., 6 mm thick</i> | m | 705 | 357 | 57.8 |
| | <i>Square tube - 20 mm, 1.6 mm thick</i> | m | 59.7 | 30.3 | 4.9 |
| | <i>Square tube - 40 mm, 2 mm thick</i> | m | 152 | 76.8 | 12.4 |
| | <i>Square tube - 100 mm, 3 mm thick</i> | m | 574 | 291 | 47.1 |
| | Extruded powdercoated | kg | 415 | 251 | 33.6 |
| | Extruded angle | kg | 383 | 244 | 32.7 |
| | Sheet | kg | 295 | 160 | 26.7 |
| | <i>1.6 mm</i> | m ² | 1 280 | 693 | 116 |
| | <i>3 mm</i> | m ² | 2 400 | 1 300 | 217 |
| | <i>6 mm</i> | m ² | 4 800 | 2 600 | 434 |

| METALS | | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|--------------------------|-----------------|---|-----------------|----------------------|--------------------|---|
| | | | | | | |
| METALS | Copper | Sheet | kg | 226 | 389 | 15.1 |
| | | <i>0.9 mm</i> | m ² | 1 819 | 3 132 | 121 |
| | | <i>1.2 mm</i> | m ² | 2 426 | 4 175 | 162 |
| | | <i>2 mm</i> | m ² | 4 043 | 6 959 | 270 |
| | | <i>3 mm</i> | m ² | 6 064 | 10 438 | 405 |
| | | Pipe | kg | 150 | 289 | 10.1 |
| | | <i>12.7 mm outer dia., 0.91 mm thick</i> | m | 45.1 | 87.0 | 3.0 |
| | | <i>19.05 mm outer dia., 1.02 mm thick</i> | m | 77.3 | 149 | 5.2 |
| | | <i>40 mm outer dia., 1.22 mm thick</i> | m | 199 | 384 | 13.4 |
| | | Wire | kg | 671 | 897 | 41.8 |
| | Stainless steel | Cold rolled | kg | 123 | 168 | 9.2 |
| | | Extruded | kg | 155 | 138 | 11.8 |
| | | Sheet | kg | 97.6 | 140 | 7.2 |
| | | <i>Sheet products</i> | kg | 238 | 263 | 14.7 |
| | | Wire | kg | 226 | 253 | 13.9 |
| | | <i>Bare - 2 mm dia.</i> | m | 5.5 | 6.2 | 0.34 |
| | | <i>Bare - 3.2 mm dia.</i> | m | 14.1 | 15.8 | 0.87 |
| | | <i>Rope - 1.6 mm dia.</i> | m | 2.4 | 2.7 | 0.15 |
| | | <i>Rope - 4 mm dia.</i> | m | 14.2 | 15.9 | 0.87 |
| <i>Rope - 8 mm dia.</i> | | m | 57.8 | 64.9 | 3.6 | |
| <i>Rope - 12 mm dia.</i> | m | 127 | 143 | 7.8 | | |

| METALS | Steel | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|--------|--|-----------------|-----------------|--------------------|---|
| | | | (MJ) | | |
| | Cold rolled | kg | 51.7 | 77.6 | 3.7 |
| | Hot rolled galvanised structural steel | kg | 43.0 | 43.2 | 3.3 |
| | Hot rolled structural steel | kg | 38.8 | 37.1 | 2.9 |
| | <i>Reinforcement bar - 6 mm dia.</i> | m | 8.6 | 8.2 | 0.64 |
| | <i>Reinforcement bar - 8 mm dia.</i> | m | 15.3 | 14.6 | 1.1 |
| | <i>Reinforcement bar - 12 mm dia.</i> | m | 34.5 | 32.9 | 2.6 |
| | Bar | kg | 29.5 | 44.3 | 2.1 |
| | Extruded hollow section | kg | 54.8 | 45.2 | 4.6 |
| | <i>Square tube - 20 mm, 1.6 mm thick</i> | m | 55.0 | 45.4 | 4.6 |
| | <i>Square tube - 50 mm, 2 mm thick</i> | m | 172 | 142 | 14.5 |
| | <i>Square tube - 100 mm, 4 mm thick</i> | m | 688 | 568 | 57.8 |
| | Pipe | kg | 42.9 | 78.1 | 3.5 |
| | <i>21.3 mm outer dia., 2.6 mm thick</i> | m | 51.4 | 93.7 | 4.2 |
| | <i>42.4 mm outer dia., 2.6 mm thick</i> | m | 110 | 199 | 9.0 |
| | <i>88.9 mm outer dia., 4 mm thick</i> | m | 359 | 654 | 29.6 |
| | <i>165.1 mm outer dia., 4.9 mm thick</i> | m | 831 | 1 512 | 68.5 |
| | Corrugated sheet | kg | 79.6 | 73.4 | 5.5 |
| | <i>per m²</i> | m ² | 259 | 239 | 17.9 |
| | <i>Corrugated sheet - pre-painted</i> | m ² | 293 | 286 | 24.9 |

| | | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) | |
|----------------------|----------------|--------------------------------|-----------------|--------------------|---|--------|
| | | | (MJ) | | | |
| MISCELLANEOUS | Asphalt | General | kg | 4.2 | 2.9 | 0.20 |
| | Carpet | Tufted nylon - average | m ² | 465 | 1 149 | 31.2 |
| | | <i>Tufted nylon - quality</i> | m ² | 484 | 1 161 | 33.3 |
| | | <i>Tufted nylon - prestige</i> | m ² | 785 | 1 866 | 55.3 |
| | | <i>Woven nylon - average</i> | m ² | 364 | 908 | 23.9 |
| | | <i>Woven nylon - quality</i> | m ² | 376 | 911 | 24.8 |
| | | Tufted wool - average | m ² | 360 | 1 343 | 41.0 |
| | | <i>Tufted wool - quality</i> | m ² | 407 | 1 545 | 49.1 |
| | | <i>Tufted wool - prestige</i> | m ² | 509 | 1 945 | 64.2 |
| | Other | Silicone | kg | 224 | 589 | 13.8 |
| | | Water | kg | 0.017 | 1.02 | 0.0013 |
| | | Wood glue (PVA) | kg | 106 | 171 | 5.4 |
| | | Solar hot water system | no. | 24 537 | 30 097 | 1 863 |
| | Paint | Solvent-based | kg | 124 | 197 | 6.3 |
| | | <i>per m²</i> | m ² | 9.3 | 14.7 | 0.47 |
| | | Water-based | kg | 111 | 206 | 6.8 |
| | | <i>per m²</i> | m ² | 8.7 | 16.1 | 0.53 |
| | Paper | Wallpaper | kg | 263 | 448 | 16.0 |
| | | <i>per m²</i> | m ² | 45.5 | 77.5 | 2.8 |
| | Rubber | Natural | kg | 75.2 | 92.1 | 2.5 |
| | | Synthetic | kg | 92.8 | 111 | 3.7 |

| PLASTICS | | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|------------------------------------|--|-----------------|-----------------|--------------------|---|
| | | | (MJ) | | |
| High density polyethylene (HDPE) | Film | kg | 147 | 172 | 6.4 |
| | 100 μm | m ² | 13.8 | 16.2 | 0.60 |
| | 200 μm | m ² | 27.6 | 32.4 | 1.2 |
| | Pipe | kg | 135 | 130 | 5.6 |
| | 32 mm inner dia., 1.88 mm thickness | m | 12.3 | 11.9 | 0.51 |
| | 63 mm inner dia., 3.75 mm thickness | m | 47.7 | 46.1 | 2.0 |
| | 125 mm inner dia., 7.35 mm thickness | m | 188 | 181 | 7.8 |
| | 250 mm inner dia., 14.71 mm thickness | m | 752 | 726 | 31.0 |
| | 500 mm inner dia., 29.41 mm thickness | m | 3 007 | 2 903 | 124 |
| | 800 mm inner dia., 47.06 mm thickness | m | 7 698 | 7 433 | 318 |
| Low density polyethylene (LDPE) | Film | kg | 136 | 122 | 6.4 |
| | 100 μm | m ² | 12.3 | 11.1 | 0.58 |
| | 200 μm | m ² | 24.7 | 22.2 | 1.2 |
| | Pipe | kg | 130 | 89.6 | 6.0 |
| | 13 mm inner dia., 3.95 mm thickness | m | 11.0 | 7.6 | 0.51 |
| | 19 mm inner dia., 4.4 mm thickness | m | 17.3 | 11.9 | 0.80 |
| | 25 mm inner dia., 5.2 mm thickness | m | 26.6 | 18.4 | 1.2 |
| 32 mm inner dia., 6.7 mm thickness | m | 43.9 | 30.3 | 2.0 | |
| Nylon | Nylon 66 | kg | 335 | 910 | 22.2 |
| | Sheet - 1.5 mm | m ² | 572 | 1 556 | 37.9 |
| | Sheet - 3 mm | m ² | 1 145 | 3 113 | 75.8 |
| | Sheet - 5 mm | m ² | 1 908 | 5 188 | 126 |
| Other | Acrylonitrile butadiene styrene (ABS) | kg | 270 | 359 | 16.0 |
| | Panel - 2mm | m ² | 577 | 767 | 34.3 |
| | Panel - 3mm | m ² | 866 | 1 151 | 51.4 |
| | Pipe - 21.4 mm outer dia., 2.1 mm thick | m | 36.8 | 48.9 | 2.2 |
| | Pipe - 48.3 mm outer dia., 3.6 mm thick | m | 146 | 194 | 8.7 |
| | Pipe - 168.3 mm outer dia., 7.7 mm thick | m | 1 122 | 1 491 | 66.6 |

| PLASTICS | Other | | | | |
|----------|-------------------------------------|-----------------|----------------------|--------------------|---|
| | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
| | Ethylene tetrafluoroethylene (ETFE) | kg | 12 063 | 22 606 | 798 |
| | <i>Film - 25.4 μm</i> | m ² | 306 | 574 | 20.3 |
| | <i>Film - 50.8 μm</i> | m ² | 613 | 1 148 | 40.5 |
| | <i>Film - 127 μm</i> | m ² | 1 532 | 2 871 | 101 |
| | Glass reinforced plastic (GRP) | kg | 299 | 529 | 18.8 |
| | <i>Panel - 10 mm</i> | m ² | 4 037 | 7 144 | 254 |
| | <i>Panel - 20 mm</i> | m ² | 8 075 | 14 288 | 509 |
| | <i>Panel - 50 mm</i> | m ² | 20 187 | 35 719 | 1 271 |
| | Linoleum | kg | 58.2 | 195 | 4.4 |
| | <i>Sheet - 2 mm</i> | m ² | 140 | 469 | 10.6 |
| | <i>Sheet - 2.5 mm</i> | m ² | 175 | 586 | 13.3 |
| | <i>Sheet - 3.2 mm</i> | m ² | 223 | 750 | 17.0 |
| | <i>Sheet - 4 mm</i> | m ² | 279 | 937 | 21.2 |
| | Polycarbonate | kg | 190 | 265 | 14.0 |
| | <i>Roofing sheet - 1 mm</i> | m ² | 228 | 318 | 16.7 |
| | <i>Roofing sheet - 2 mm</i> | m ² | 457 | 635 | 33.5 |
| | <i>Roofing sheet - 3 mm</i> | m ² | 685 | 953 | 50.2 |
| | <i>Roofing sheet - 6 mm</i> | m ² | 1 371 | 1 905 | 100 |
| | Polymethyl methacrylate (PMMA) | kg | 230 | 215 | 15.4 |
| | <i>Sheet - 3 mm</i> | m ² | 822 | 768 | 54.9 |
| | <i>Sheet - 4 mm</i> | m ² | 1 096 | 1 023 | 73.2 |
| | <i>Sheet - 5 mm</i> | m ² | 1 370 | 1 279 | 91.4 |
| | <i>Sheet - 6 mm</i> | m ² | 1 644 | 1 535 | 110 |
| | <i>Sheet - 8 mm</i> | m ² | 2 192 | 2 047 | 146 |
| | <i>Sheet - 10 mm</i> | m ² | 2 740 | 2 558 | 183 |

| | | | Functional Unit | Embodied Energy (MJ) | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|-----------------------------------|--------------------------|---|-----------------|----------------------|--------------------|---|
| PLASTICS | Polypropylene | Sheet | kg | 159 | 186 | 7.4 |
| | | Sheet - 2 mm | m ² | 287 | 335 | 13.4 |
| | | Sheet - 3 mm | m ² | 431 | 502 | 20.0 |
| | | Sheet - 4 mm | m ² | 574 | 670 | 26.7 |
| | | Sheet - 6 mm | m ² | 861 | 1 005 | 40.1 |
| | | Sheet - 10 mm | m ² | 1 435 | 1 675 | 66.8 |
| | | Sheet - 12 mm | m ² | 1 722 | 2 010 | 80.2 |
| | | Sheet - 15 mm | m ² | 2 153 | 2 512 | 100 |
| | Polyurethane | Flexible foam | kg | 127 | 443 | 7.7 |
| | | Underlay - 7 mm, 64 kg/m ³ | m ² | 56.8 | 198 | 3.4 |
| | | Underlay - 7 mm, 69 kg/m ³ | m ² | 61.4 | 214 | 3.7 |
| | | Underlay - 10 mm, 73 kg/m ³ | m ² | 92.5 | 323 | 5.6 |
| | | Underlay - 10 mm, 123 kg/m ³ | m ² | 156 | 543 | 9.4 |
| | Polyvinyl chloride (PVC) | Film | kg | 190 | 758 | 11.2 |
| | | 19 µm | m ² | 5.0 | 20.0 | 0.30 |
| | | 25 µm | m ² | 6.6 | 26.3 | 0.39 |
| | | uPVC | kg | 76.3 | 561 | 4.2 |
| | | Pipe - 21.35 mm outer dia., 1.8 mm thick | m | 11.7 | 86.2 | 0.64 |
| | | Pipe - 60.25 mm outer dia., 2.6 mm thick | m | 50.0 | 367 | 2.7 |
| | | Pipe - 114.3 mm outer dia., 4.85 mm thick | m | 177 | 1 301 | 9.7 |
| | | Pipe - 225.3 mm outer dia., 11.1 mm thick | m | 792 | 5 826 | 43.2 |
| SAND, STONE & CERAMICS | Brick | General | kg | 3.5 | 1.8 | 0.32 |
| | Other | Gravel | kg | 0.48 | 1.9 | 0.036 |
| | | Recycled aggregate | kg | 0.11 | 0.10 | 0.008 |
| | | Sand | kg | 0.34 | 1.8 | 0.024 |
| | | Sanitary ceramic | kg | 98.0 | 89.8 | 6.4 |
| | Stone | Dimension stone | kg | 16.3 | 16.5 | 1.3 |
| | Tiles | Ceramic tile | kg | 18.9 | 15.2 | 1.3 |
| | | Clay roof tile | kg | 7.5 | 4.7 | 0.61 |

| TIMBER PRODUCTS | | Functional Unit | Embodied Energy | Embodied Water (L) | Embodied Greenhouse Gas Emissions (kgCO ₂ e) |
|-----------------------------|---|-----------------|-----------------|--------------------|---|
| | | | (MJ) | | |
| Cork | Slab | kg | 179 | 199 | 9.5 |
| | 6 mm | m ² | 129 | 143 | 6.8 |
| | 10 mm | m ² | 215 | 238 | 11.4 |
| | 12 mm | m ² | 258 | 286 | 13.6 |
| | 20 mm | m ² | 430 | 477 | 22.7 |
| | 50 mm | m ² | 1 074 | 1 192 | 56.8 |
| Hardwood | Air-dried | m ³ | 13 632 | 19 110 | 944 |
| | Kiln-dried - dressed | m ³ | 41 597 | 58 411 | 2 269 |
| | Kiln-dried - structural | m ³ | 19 389 | 25 332 | 1 178 |
| Manufactured timber product | Cross laminated timber (CLT) | m ³ | 9 607 | 8 608 | 645 |
| | 60 mm | m ² | 576 | 516 | 38.7 |
| | 105 mm | m ² | 1 009 | 904 | 67.7 |
| | 175 mm | m ² | 1 681 | 1 506 | 113 |
| | Glulam - indoor | m ³ | 29 996 | 35 813 | 1 718 |
| | Glulam - outdoor | m ³ | 28 279 | 31 246 | 1 605 |
| | Laminated veneer lumber (LVL) | m ³ | 17 479 | 18 025 | 1 059 |
| | MDF board | m ³ | 15 016 | 8 471 | 899 |
| | Melamine-coated - 16 mm | m ² | 344 | 283 | 18.7 |
| | Melamine-coated - 18 mm | m ² | 390 | 323 | 21.3 |
| | Melamine-coated - 25 mm | m ² | 557 | 453 | 30.5 |
| | OSB sheet | m ³ | 14 422 | 17 997 | 751 |
| | Particleboard - indoor | m ³ | 12 717 | 10 720 | 696 |
| | Particleboard - outdoor | m ³ | 15 879 | 20 491 | 813 |
| | Plywood - indoor decorative | m ³ | 63 691 | 69 363 | 3 680 |
| | Plywood - outdoor | m ³ | 26 790 | 23 083 | 1 777 |
| | Structural insulated panel (SIP) - 112 mm | m ² | 2 624 | 4 219 | 135 |
| | 142 mm | m ² | 3 327 | 5 349 | 171 |
| 162 mm | m ² | 3 795 | 6 103 | 195 | |
| Softwood | Air-dried | m ³ | 9 392 | 13 091 | 549 |
| | Kiln-dried | m ³ | 9 704 | 13 181 | 583 |