

## COMPARISON OF INSULATION MATERIALS

Material	Heat Loss	Cost	Use
Aerogel	13	65	W R F
Cork	40	25	W R F
Cotton	39	5	L W F C
Flax	38	-	L W R F
Foam (10mm)	158	10	W
Foil Quilt	33	7	R
Glass Wool	40	5	L W
Hemp	37	5	W F L R
Mineral Wool	44	7	L W
Paper	35	6	L
Perlite Beads	42	-	W
Polystyrene	24	15	R F W
Sheeps Wool	39	7	L W
Straw	100	-	W R
Wood	33	12	W L F

### Table decoder:

**Heat Loss** - The smaller this number, the slower the material conducts heat (or cold) and therefore the better it insulates. This figure is the material's U value x 1000. U value is the measure of how fast a material conducts heat. This has been multiplied by 1000 to give whole numbers which are easier to compare at a glance.

**Cost** - In £s per metre square in 2007. This is for a comparatively useful thickness of material.

**Use** - Main area/s of use. Roof (R), Loft (L), Wall (W), Floor (F), Ceiling (C)

Material	Recycling	Renewable	Embodied	Biodegradable
Aerogel	H	N	H	Y
Cork	H	Y	L	Y
Cotton	H	Y	L	Y
Flax	H	Y	L	Y
Foam (10mm)	L	N	H	N
Foil Quilt	L	N	H	N
Glass Wool	L	N	H	N
Hemp	H	Y	L	Y
Mineral Wool	H	N	L	N
Paper	H	Y	L	Y
Perlite Beads	L	N	H	N
Polystyrene	H	N	H	N
Sheeps Wool	H	Y	L	Y
Straw	H	Y	L	Y
Wood	H	Y	L	Y

### Table decoder:

**Recycling** - Ease of recycling. Higher (H) Lower (L)

**Renewable** - Renewable source material. Will it grow back? Yes (Y) No (N)

**Embodied** - Embodied energy (due to production & transportation). Higher (H) Lower (L)

**Biodegradable** - Biodegradable in landfill. Can it be easily disposed of? Yes (Y) No (N)

Note: Costs are subject to change. 2007 prices shown.