H+H Calculated Ψ-values

In accordance with BRE Report BR497 (2016) and IP 1/06 (using TRISCO version 13.0w)



Sheet Ref: WT / EW003 Sheet 1 of 1 Date of issue: 08 July 2021

External wall junctions

EW003: Brick + 50mm Cavity + 100mm foil faced insulation (0.018W/mK) + 100mm Celcon Solar

Junction SAP ref		H+H calc ref EW003	H+H Drawing ref	Calculated Ψ-value	Temperature factor (corner value)
E17	Corner (inverted)	CI001	PF - 15	-0.060	0.982
E16	Corner (normal)	CN001	PF - 14	0.036	0.945
E5	150mm Beam & Celcon block infill + 100mm insulation (0.022W/mK) + 65mm screed	GF001	PF - 01	0.054	0.934 (0.888)
E5	150mm Beam & Celcon block infill + 125mm insulation (0.022W/mK) + 65mm screed	GF002	PF - 01	0.052	0.938 (0.891)
E5	150mm Beam & Celcon block infill + 150mm insulation (0.022W/mK) + 65mm screed	GF003	PF - 01	0.051	0.941 (0.894)
E5	150mm Cast in-situ suspended slab + 100mm insulation (0.022W/mK) below	GF011	PF - 02	0.105	0.898 (0.807)
E5	150mm Cast in-situ suspended slab + 125mm insulation (0.022W/mK) below	GF012	PF - 02	0.108	0.903 (0.815)
E5	150mm Cast in-situ suspended slab + 150mm insulation (0.022W/mK) below	GF013	PF - 02	0.108	0.907 (0.821)
E5	100mm Ground bearing slab + 100mm insulation (0.022W/mK) below	GF021	PF - 03	0.062	0.935 (0.875)
E5	100mm Ground bearing slab + 125mm insulation (0.022W/mK) below	GF022	PF - 03	0.067	0.938 (0.879)
E5	100mm Ground bearing slab + 150mm insulation (0.022W/mK) below	GF023	PF - 03	0.067	0.940 (0.883)
E6	240mm Timber joist built in (uninsulated void is worse case)	IF001	PF - 08	0.001	0.978
E6	300mm Timber joist built in (uninsulated void is worse case)	IF002	PF - 08	0.002	0.978
E7	150mm concrete plank separating floor (uninsulated void is worse case)	IF003	PF - 09	0.028	0.974
E7	225mm concrete plank separating floor (uninsulated void is worse case)	IF004	PF - 09	0.037	0.972
E20	195mm Timber joist built in (fully insulated (0.044W/mK) over garage)	IF007	PF - 25	0.059	0.887
E20	240mm Timber joist built in (fully insulated (0.044W/mK) over garage)	IF005	PF - 25	0.054	0.898
E2	Independent lintels, Proprietary insulated closer (Thermabate), 30mm frame overlap	LN001	PF - 04	0.051	0.916
E2	Independent lintels, Proprietary insulated closer (Cavalok), 30mm frame overlap	LN002	PF - 04	0.059	0.915
E2	Insulated open back lintel (max 3mm steel), 30mm frame overlap	LN003	PF - 22	0.299	0.888
E1	Insulated lintel (3mm steel) with perforated base plate (max equiv λ = 30W/mK), 30mm frame ove	LN004	PF - 05	0.390	0.832
E2	Catnic Thermally Broken Lintel (max 4mm steel), 30mm frame overlap	LN005	PF - 26	0.044	0.945
E25	2 x 100mm Celcon Standard block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW175s	PF - 24	0.026	0.974
E18	2 x 100mm Celcon Standard block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW175	PF - 16	0.034	0.959
E25	2 x 100mm Celcon Standard block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW100s	PF - 24	0.029	0.971
E18	2 x 100mm Celcon Standard block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW100	PF - 16	0.036	0.958
E25	2 x 100mm Celcon Standard block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW150s	PF - 24	0.035	0.966
E18	2 x 100mm Celcon Standard block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW150	PF - 16	0.039	0.955
E25	2 x 100mm Celcon High/Super Strength block separating wall + 75mm fully insulated (0.044W/ml	PW275s	PF - 24	0.026	0.974
E18	2 x 100mm Celcon High/Super Strength block separating wall + 75mm fully insulated (0.044W/ml	PW275	PF - 16	0.034	0.959
E25	2 x 100mm Celcon High/Super Strength block separating wall + 100mm fully insulated (0.044W/n	PW200s	PF - 24	0.029	0.971
E18	2 x 100mm Celcon High/Super Strength block separating wall + 100mm fully insulated (0.044W/n	PW200	PF - 16	0.036	0.958
E25	2 x 100mm Celcon High/Super Strength block separating wall + 150mm fully insulated (0.044W/n	PW250s	PF - 24	0.035	0.966
E18	2 x 100mm Celcon High/Super Strength block separating wall + 150mm fully insulated (0.044W/n	PW250	PF - 16	0.040	0.955
E25	2 x 100mm Dense concrete block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW375s	PF - 24	0.028	0.978
E18	2 x 100mm Dense concrete block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW375	PF - 16	0.040	0.967
E25	2 x 100mm Dense concrete block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW300s	PF - 24	0.031	0.976
E18	2 x 100mm Dense concrete block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW300	PF - 16	0.043	0.966
E25	2 x 100mm Dense concrete block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW350s	PF - 24	0.039	0.972
E18	2 x 100mm Dense concrete block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW350	PF - 16	0.047	0.963
E10	400mm insulation quilt (0.044W/mK), minimum roof pitch 40°	RE001	PF - 12	0.106	0.902
E11	150mm insulation (0.044W/mK) between + 50mm (0.022W/mK) beneath rafters	RE002	PF - 23	0.053	0.956
E12	400mm insulation quilt (0.044W/mK)	RG001	PF - 10	0.049	0.937
E13	150mm insulation (0.044W/mK) between + 50mm (0.022W/mK) beneath rafters	RG002	PF - 11	0.052	0.924
E4	Proprietary insulated closer (Thermabate), 30mm frame overlap	RV001	PF - 07	0.046	0.900
E4	Proprietary insulated closer (Cavalok), 30mm frame overlap	RV002	PF - 07	0.051	0.901
E3	Proprietary insulated closer (Thermabate), 30mm frame overlap	SL001	PF - 06	0.042	0.867
E3	Proprietary insulated closer (Cavalok), 30mm frame overlap	SL002	PF - 06	0.047	0.867