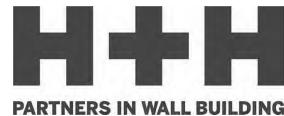


# H+H Calculated $\Psi$ -values

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



Sheet Ref: WT / EW035

Sheet 1 of 1

Date of issue: 08 July 2021

## External wall junctions

**EW035: Brick + 150mm Cavity fully filled with insulation (0.032W/mK) + 100mm Celcon Solar**

Junction SAP ref		H+H calc ref EW035 - ....	H+H Drawing ref	Calculated $\Psi$ -value	Temperature factor (corner value)
E17	Corner (inverted)	CI001	FF - 15	-0.080	0.978
E16	Corner (normal)	CN001	FF - 14	0.044	0.933
E5	150mm Beam & Celcon block infill + 100mm insulation (0.022W/mK) + 65mm screed	GF001	FF - 01	0.055	0.931 (0.880)
E5	150mm Beam & Celcon block infill + 125mm insulation (0.022W/mK) + 65mm screed	GF002	FF - 01	0.054	0.935 (0.883)
E5	150mm Beam & Celcon block infill + 150mm insulation (0.022W/mK) + 65mm screed	GF003	FF - 01	0.053	0.938 (0.886)
E5	150mm Cast in-situ suspended slab + 100mm insulation (0.022W/mK) below	GF011	FF - 02	0.112	0.891 (0.792)
E5	150mm Cast in-situ suspended slab + 125mm insulation (0.022W/mK) below	GF012	FF - 02	0.116	0.896 (0.799)
E5	150mm Cast in-situ suspended slab + 150mm insulation (0.022W/mK) below	GF013	FF - 02	0.116	0.900 (0.805)
E5	100mm Ground bearing slab + 100mm insulation (0.022W/mK) below	GF021	FF - 03	0.064	0.932 (0.869)
E5	100mm Ground bearing slab + 125mm insulation (0.022W/mK) below	GF022	FF - 03	0.069	0.935 (0.873)
E5	100mm Ground bearing slab + 150mm insulation (0.022W/mK) below	GF023	FF - 03	0.070	0.938 (0.876)
E6	240mm Timber joist built in (uninsulated void is worse case)	IF001	FF - 08	0.002	0.973
E6	300mm Timber joist built in (uninsulated void is worse case)	IF002	FF - 08	0.003	0.973
E7	150mm concrete plank separating floor (uninsulated void is worse case)	IF003	FF - 09	0.028	0.971
E7	225mm concrete plank separating floor (uninsulated void is worse case)	IF004	FF - 09	0.037	0.969
E20	195mm Timber joist built in (fully insulated (0.044W/mK) over garage)	IF007	FF - 25	0.060	0.883
E20	240mm Timber joist built in (fully insulated (0.044W/mK) over garage)	IF005	FF - 25	0.056	0.894
E2	Independent lintels, Proprietary insulated closer (Thermabate), 30mm frame overlap	LN001	FF - 04	0.042	0.924
E2	Independent lintels, Proprietary insulated closer (Cavalok), 30mm frame overlap	LN002	FF - 04	0.050	0.919
E2	Insulated open back lintel (max 3mm steel), 30mm frame overlap	LN003	FF - 22	0.289	0.889
E1	Insulated lintel (3mm steel) with perforated base plate (max equiv $\lambda$ = 30W/mK), 30mm frame ove	LN004	FF - 05	0.380	0.832
E2	Catnic Thermally Broken Lintel (max 4mm steel), 30mm frame overlap	LN005	FF - 26	0.037	0.945
E25	2 x 100mm Celcon Standard block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW175s	FF - 24	0.024	0.972
E18	2 x 100mm Celcon Standard block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW175	FF - 16	0.033	0.957
E25	2 x 100mm Celcon Standard block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW100s	FF - 24	0.027	0.969
E18	2 x 100mm Celcon Standard block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW100	FF - 16	0.035	0.955
E25	2 x 100mm Celcon Standard block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW150s	FF - 24	0.033	0.964
E18	2 x 100mm Celcon Standard block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW150	FF - 16	0.039	0.953
E25	2 x 100mm Celcon High/Super Strength block separating wall + 75mm fully insulated (0.044W/mK)	PW275s	FF - 24	0.024	0.972
E18	2 x 100mm Celcon High/Super Strength block separating wall + 75mm fully insulated (0.044W/mK)	PW275	FF - 16	0.034	0.957
E25	2 x 100mm Celcon High/Super Strength block separating wall + 100mm fully insulated (0.044W/mK)	PW200s	FF - 24	0.027	0.969
E18	2 x 100mm Celcon High/Super Strength block separating wall + 100mm fully insulated (0.044W/mK)	PW200	FF - 16	0.036	0.955
E25	2 x 100mm Celcon High/Super Strength block separating wall + 150mm fully insulated (0.044W/mK)	PW250s	FF - 24	0.034	0.964
E18	2 x 100mm Celcon High/Super Strength block separating wall + 150mm fully insulated (0.044W/mK)	PW250	FF - 16	0.039	0.953
E25	2 x 100mm Dense concrete block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW375s	FF - 24	0.026	0.976
E18	2 x 100mm Dense concrete block separating wall + 75mm fully insulated (0.044W/mK) cavity	PW375	FF - 16	0.040	0.965
E25	2 x 100mm Dense concrete block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW300s	FF - 24	0.030	0.975
E18	2 x 100mm Dense concrete block separating wall + 100mm fully insulated (0.044W/mK) cavity	PW300	FF - 16	0.042	0.964
E25	2 x 100mm Dense concrete block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW350s	FF - 24	0.037	0.970
E18	2 x 100mm Dense concrete block separating wall + 150mm fully insulated (0.044W/mK) cavity	PW350	FF - 16	0.047	0.961
E10	400mm insulation quilt (0.044W/mK), minimum roof pitch 40°	RE001	FF - 12	0.096	0.902
E11	150mm insulation (0.044W/mK) between + 50mm (0.022W/mK) beneath rafters	RE002	FF - 23	0.041	0.956
E12	400mm insulation quilt (0.044W/mK)	RG001	FF - 10	0.053	0.931
E13	150mm insulation (0.044W/mK) between + 50mm (0.022W/mK) beneath rafters	RG002	FF - 11	0.054	0.919
E4	Proprietary insulated closer (Thermabate), 30mm frame overlap	RV001	FF - 07	0.036	0.911
E4	Proprietary insulated closer (Cavalok), 30mm frame overlap	RV002	FF - 07	0.042	0.907
E3	Proprietary insulated closer (Thermabate), 30mm frame overlap	SL001	FF - 06	0.033	0.880
E3	Proprietary insulated closer (Cavalok), 30mm frame overlap	SL002	FF - 06	0.038	0.874