• WARM Thermal bridge decision tree									
Low Energy Build	ow Energy Building Practice						NB: this document is broadly representative, but exact process may		
JUNCTION DETAIL									
Passivhaus designer									
		It is probable that thermal bridge-fre W/mK) or is a neg bridge, based on	this junction is e ($\psi \leq 0.01$ gative thermal my experience	I think this junction positive thermal bri therefore I need to the PHPP.		will be a idge and include it in	I do not experier whether will be a	I do not have enough experience to decide whether or not this junction will be a positive thermal	
Decision		and/or on the bas of insulation roun	d the junction.	On the basis previous Psi- calculations, make a safe Psi/Chi-value assumption f	of value I can or this	I do not have enough experience to make a safe Psi/Chi-value assumption for this junction.	bridge.		
Action Informs certifier of their assumption and the basis for this assumption. Informs certifier that they do not know what Psi/Chi-value to use. Follows process for submitting thermal bridge evidence detailed in "Evidence checklist": https://peterwarm.co.uk/resources									
Passivhaus certifier									
Decision	This ass realistic,	umption appears based on the	This assumption does not appear realistic.						
Decision	uesigner				I have enough experience of this kind of junction to make a safe Psi-value assumption.		I do not of this k safe Ps	I do not have enough experience of this kind of junction to make a safe Psi-value assumption.	
Action	Action Passivhaus evidence register that the assumption is accepted.		Makes an assumption for use in the certification PHPP and informs designer.				nforms designer that a Psi-value calculation must be carried out.		

Sources of Psi-values

Please inform WARM if any of these links no longer work. Prices correct at time of writing.



PHINZ High-performance construction details handbook (PDF and CAD file) <u>https://passivehouse.nz/hpcd-handbook/</u>

Also includes approximate construction costs of different details for comparison. Particularly good for timber frame projects.



Cost: free

Passivhaus-Bauteilkatalog (real book!) https://www.amazon.co.uk/Passivhaus-Baut eilkatalog-OEkologisch-Konstruktionen-Ecol ogically-Constructions-dp-3035616868/dp/3 035616868/ref=dp_ob_title_bk

Generally more geared towards German construction details, but useful for context.

Cost: in region of £80



AECB Carbonlite THERM course https://www.passivhaustraining.co.uk/onlin e/

Learn how to calculate your own Psi-values using the free software package, THERM.

Cost: £200 + VAT, or free for delegates on the AECB Carbonlite Certified Passivhaus Designer course.



Understanding Passivhaus Bundle 4 <u>https://first-in-architecture.myshopify.com/collections/digital-books/products/understanding-passivhaus-2nd-edition-bundle-4</u>

Digital package of Passivhaus-suitable details, CAD/Sketchup models and Flixo thermal bridge calculation files

Cost: in region of £75



Understanding Passivhaus Details: calculated https://first-in-architecture.myshopify.com/products/ details-calculated?_pos=3&_sid=4dcf4b092&_ss=r

As above, but hard copy showing drawings and Flixo report outputs only.

Cost: in region of £40