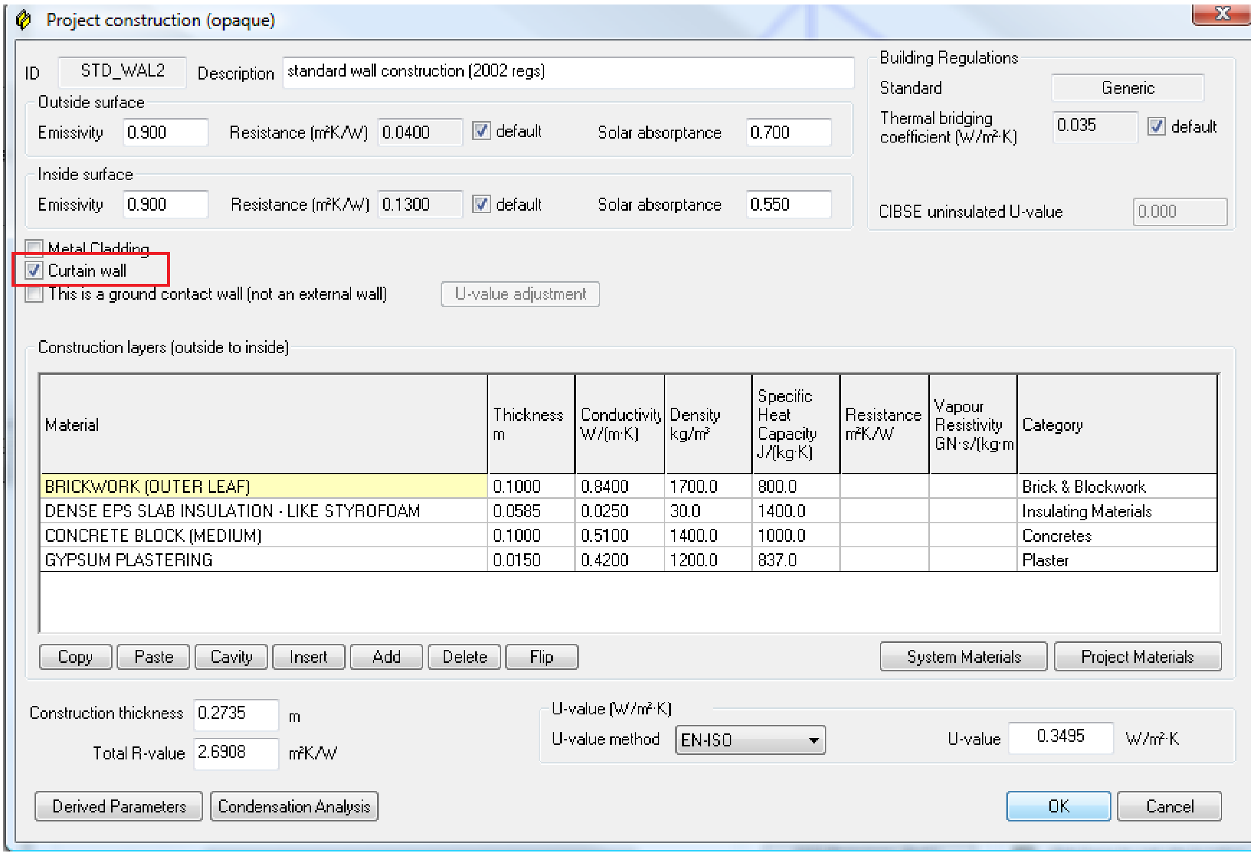
INTEGRATED
ENVIRONMENTAL
SOLUTIONS

Thermal: VE Compliance
Version: v6.0

The U-Values of window & wall constructions reported on the BRUKL certificate are different from those I have assigned, why is this?

Element	Ua-Limit	Ua-Calc	Ui-Limit	Ui-Calc	Surface where this maximum value occurs*
Wall**	0.35	0	0.7	0	UNKNOWN
Floor	0.25	0.25	0.7	0.25	RM1_0000:Surf[0]
Roof	0.25	0.25	0.35	0.25	RM5_0000:Surf[0]
Windows***, roof windows, and rooflights	2.2	0.68	3.3	1.98	RM1_0000:Surf[1]
Personnel doors	2.2	0	3	0	No Personnel doors in building

If the Average U-value (Ua-Calc on BRUKL) of the windows is lower than expected then check the assigned external wall constructions to see if the "Curtain Wall" box has been ticked.



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Curtain walls are treated as a special case in Part L2 2006 (see L2A Table 4). Checking this box means they are grouped with windows, roof windows and rooflights for the Criterion 2 check. This is why the average U-value for windows is lower than expected. There is also a note on the BRUKL certificate that covers this.

Criterion 2: The performance of the building fabric and the building services systems should be no worse than the design limits

2.1 Are the U-values better than the design limits? Better than design limits

Element	$U_{a\text{-}Limit}$	$U_{a\text{-}Calc}$	$U_{i\text{-}Limit}$	$U_{i\text{-}Calc}$	Surface where this maximum value occurs*
Wall**	0.35	0	0.7	0	UNKNOWN
Floor	0.25	0.25	0.7	0.25	RM1_0000:Surf[0]
Roof	0.25	0.25	0.35	0.25	RM5_0000:Surf[0]
Windows***, roof windows, and rooflights	2.2	0.68	3.3	1.98	RM1_0000:Surf[1]
Personnel doors	2.2	0	3	0	No Personnel doors in building
Vehicle access & similar large doors	1.5	0	4	0	No Vehicle access doors in building
High usage entrance doors	6	0	6	0	No High usage entrance doors in building

$U_{a\text{-}Limit}$ = Limiting area-weighted average U-values [W/(m2K)]
$U_{a\text{-}Calc}$ = Calculated area-weighted average U-values [W/(m2K)]
$U_{i\text{-}Limit}$ = Limiting individual element U-values [W/(m2K)]
$U_{i\text{-}Calc}$ = Calculated individual element U-values [W/(m2K)]

* There might be more than one surface exceeding the limiting standards.
** Automatic U-value check by the tool does not apply to curtain walls whose limiting standards are similar to those for windows.
*** Display windows and similar glazing are not required to meet the standard given in this table.