TYPICAL U-VALUES

BUILT-IN USING DRITHERM® CAVITY SLAB 32

	U-value (W/m²K)				
DriTherm® Cavity Slab 32 thickness (mm)	Medium block (0.45 W/mK)	High strength aircrete (0.19 W/mK)	Standard aircrete (0.15 W/mK)	Lightweight aircrete (0.11 W/mK)	
300 (2x150)	0.11	0.10	0.10	0.10	
200 (2x100)	0.15	0.15	0.14	0.14	
150	0.19	0.18	0.17	0.17	
125	0.22	0.21	0.20	0.20	
100	0.26	0.25	0.24	0.23	

NOTE: The Uvalues have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of no more than 12.5mm² for structural cavities up to 100mm wide. For cavities greater than 100mm up to 150mm, the cross sectional area of wall ties is assumed to be 24mm². For cavities above 150mm, the cross sectional area of wall ties is assumed to be 60mm². Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

BUILT-IN USING DRITHERM® CAVITY SLAB 34

	U-value (W/m²K)			
DriTherm® Cavity Slab 34 thickness (mm)	Medium block (0.45 W/mK)	High strength aircrete (0.19 W/mK)	Standard aircrete (0.15 W/mK)	Lightweight aircrete (0.11 W/mK)
300 (3x100)	0.11	0.11	0.11	0.10
200 (2x100)	0.16	0.15	0.15	0.15
150 (2x75)	0.20	0.19	0.18	0.18
125	0.23	0.22	0.21	0.20
100	0.27	0.26	0.25	0.24

NOTE: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of no more than 12.5mm² for structural cavities up to 100mm wide. For cavities greater than 100mm up to 150mm, the cross sectional area of wall ties is assumed to be 24mm². For cavities above 150mm, the cross sectional area of wall ties is assumed to be 60mm². Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

BUILT-IN USING DRITHERM® CAVITY SLAB 37

	U-Value (W/m ² K)			
DriTherm® Cavity Slab 37 thickness (mm)	Medium block (0.45 W/mK)	High strength aircrete (0.19 W/mK)	Standard aircrete (0.15 W/mK)	Lightweight aircrete (0.11 W/mK)
300 (2x150)	0.12	0.12	0.11	0.11
200 (2x100)	0.17	0.16	0.16	0.16
150	0.21	0.20	0.20	0.19
125	0.25	0.23	0.23	0.22
100	0.29	0.27	0.27	0.26

NOTE: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of no more than 12.5mm² for structural cavities up to 100mm wide. For cavities greater than 100mm up to 150mm, the cross sectional area of wall ties is assumed to be 24mm². For cavities above 150mm, the cross sectional area of wall ties is assumed to be 60mm². Air gap correction level is zero. Multiple layers are required for several of the solutions detailed above.

For any U-value calculations for alternative construction build-ups, please contact our Technical Support Team on 01744 766 666 or visit our online tool at knaufinsulation.co.uk/uvalue-calculator

For written U-value calculations, please email details of your full construction build-up to <u>technical.uk@knaufinsulation.com</u> and we will respond accordingly to meet your requirements.

TYPICAL U-VALUES

BLOWN-IN (INJECTED) USING SUPAFIL® 34

	U-value (W/m ² K)			
Cavity width thickness (mm)	Medium block (0.45 W/mK)	High strength aircrete (0.19 W/mK)	Standard aircrete (0.15 W/mK)	Lightweight aircrete (0.11 W/mK)
300	0.11	0.11	0.11	0.10
200	0.16	0.15	0.15	0.15
150	0.20	0.19	0.18	0.18
125	0.23	0.22	0.21	0.20
100	0.28	0.26	0.25	0.24

Note: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of no more than 12.5mm² for structural cavities up to 100mm wide. For cavities greater than 100mm up to 150mm, the cross sectional area of wall ties is assumed to be 24mm². For cavities above 150mm, the cross sectional area of wall ties is assumed to be 60mm². Air gap correction level is zero.

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TYPICAL U-VALUES

FOR FULLY FILLED MASONRY CAVITY WALLS - EXISTING - USING SUPAFIL® 40 (BRICK OUTER LEAF / CAVITY / 100MM INNER LEAF AS DETAILED BELOW)

	U-value (W/m²K)			
Cavity width (mm)	Brick (0.56 W/mK)	Block (1.13 W/mK)	Block (0.51 W/mK)	Block (0.34 W/mK)
100	0.32	0.33	0.31	0.31
85	0.36	0.37	0.36	0.35
75	0.39	0.41	0.39	0.38
65	0.44	0.45	0.43	0.42
50	0.52	0.55	0.52	0.50

Note: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of 100mm - 12.5mm², >100 - 150mm - 24mm², >150mm - 60mm². Air gap correction level is zero.

FOR FULLY FILLED MASONRY CAVITY WALLS – EXISTING – USING SUPAFIL® CARBON PLUS (BRICK OUTER LEAF / CAVITY / 100MM INNER LEAF AS DETAILED BELOW)

	U-value (W/m²K)			
Cavity width (mm)	Brick (0.56 W/mK)	Block (1.13 W/mK)	Block (0.51 W/mK)	Block (0.34 W/mK)
100	0.28	0.28	0.28	0.27
85	0.32	0.33	0.31	0.31
75	0.35	0.36	0.35	0.34
65	0.39	0.40	0.39	0.37
50	0.47	0.49	0.46	0.45

Note: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints. Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of 100mm - 12.5mm², >100 - 150mm - 24mm², >150mm - 60mm². Air gap correction level is zero.

For any U-value calculations for alternative construction build-ups, please contact our Technical Support Team on 01744 766 666 or visit our online tool at knaufinsulation.co.uk/uvalue-calculator

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