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How to achieve compliance using DriTherm® Cavity Slab



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How to achieve compliance using DriTherm® Cavity Slab

U-value with 102.5mm brick outer leaf

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.14	0.14	0.13	0.13	0.13
	200 (100+100)	0.15	0.15	0.15	0.14	0.14
	175 (100+75)	0.17	0.17	0.16	0.16	0.16
	150	0.19	0.19	0.18	0.17	0.17
	125	0.22	0.22	0.21	0.20	0.20
	100	0.27	0.26	0.25	0.24	0.23

U-value with dense block outer leaf and render

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.14	0.14	0.13	0.13	0.13
	200 (100+100)	0.16	0.15	0.15	0.14	0.14
	175 (100+75)	0.18	0.17	0.16	0.16	0.16
	150	0.19	0.19	0.18	0.18	0.17
	125	0.22	0.22	0.21	0.20	0.20
	100	0.27	0.26	0.25	0.24	0.23

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.

To see how our DriTherm® Cavity Slabs fit within your project visit our online U-value calculator here:



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How to achieve compliance using DriTherm® Cavity Slab

U-value with 102.5mm brick outer leaf and 35mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.12	0.12	0.12	0.11	0.11
	200 (100+100)	0.13	0.13	0.13	0.12	0.12
	175 (100+75)	0.15	0.14	0.14	0.14	0.13
	150	0.16	0.15	0.15	0.15	0.14
	125	0.18	0.18	0.17	0.17	0.16
	100	0.21	0.20	0.19	0.19	0.18

U-value with dense block outer leaf and render plus 35mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.12	0.12	0.11	0.11	0.11
	200 (100+100)	0.13	0.13	0.12	0.12	0.12
	175 (100+75)	0.15	0.15	0.14	0.14	0.13
	150	0.16	0.16	0.15	0.14	0.14
	125	0.18	0.18	0.17	0.16	0.16
	100	0.21	0.20	0.19	0.19	0.18

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.

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How to achieve compliance using DriTherm® Cavity Slab

U-value with 102.5mm brick outer leaf and 50mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.11	0.11	0.11	0.11	0.10
	200 (100+100)	0.12	0.12	0.12	0.12	0.11
	175 (100+75)	0.13	0.13	0.13	0.13	0.12
	150	0.14	0.14	0.14	0.13	0.13
	125	0.16	0.16	0.15	0.15	0.15
	100	0.18	0.18	0.17	0.17	0.16

U-value with dense block outer leaf and render plus 50mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.11	0.11	0.11	0.11	0.10
	200 (100+100)	0.12	0.12	0.12	0.12	0.11
	175 (100+75)	0.13	0.13	0.13	0.13	0.12
	150	0.14	0.14	0.14	0.13	0.13
	125	0.16	0.16	0.15	0.15	0.15
	100	0.18	0.18	0.17	0.17	0.16

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.

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How to achieve compliance using DriTherm® Cavity Slab

U-value with 102.5mm brick outer leaf and 65mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.10	0.10	0.10	0.10	0.10
	200 (100+100)	0.11	0.11	0.11	0.11	0.11
	175 (100+75)	0.12	0.12	0.12	0.12	0.11
	150	0.13	0.13	0.12	0.12	0.12
	125	0.15	0.14	0.14	0.14	0.13
	100	0.16	0.16	0.15	0.15	0.15

U-value with dense block outer leaf and render plus 65mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.10	0.10	0.10	0.10	0.10
	200 (100+100)	0.11	0.11	0.11	0.11	0.11
	175 (100+75)	0.12	0.12	0.12	0.12	0.12
	150	0.13	0.13	0.12	0.12	0.12
	125	0.15	0.14	0.14	0.14	0.14
	100	0.16	0.16	0.16	0.15	0.15

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.

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How to achieve compliance using DriTherm® Cavity Slab

U-value with 102.5mm brick outer leaf and 75mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.10	0.10	0.10	0.10	0.09
	200 (100+100)	0.11	0.11	0.10	0.10	0.10
	175 (100+75)	0.12	0.12	0.11	0.11	0.11
	150	0.12	0.12	0.12	0.12	0.11
	125	0.14	0.13	0.13	0.13	0.13
	100	0.15	0.15	0.14	0.14	0.14

U-value with dense block outer leaf and render plus 75mm insulated plasterboard

	100mm Inner Leaf	Dense Block (λ1.13)	Medium Block (λ0.45)	High strength aircrete (λ0.19)	Standard aircrete (λ0.15)	Lightweight aircrete (λ0.11)
Product	Insulation thickness (mm)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)	U-value (W/m²K)
DriTherm® Cavity Slab 32	225 (125+100)	0.10	0.10	0.10	0.10	0.09
	200 (100+100)	0.11	0.11	0.10	0.10	0.10
	175 (100+75)	0.12	0.12	0.11	0.11	0.11
	150	0.12	0.12	0.12	0.12	0.11
	125	0.14	0.14	0.13	0.13	0.13
	100	0.15	0.15	0.15	0.14	0.14

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.

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Block types and PIR brands

LIGHTWEIGHT AIRCRETE		≤0.11 W/mK
Manufacturer	Block	Compressive Strength (N/mm ²)
Forterra	Thermalite Turbo	2.9
H+H (Celcon)	Solar Grade	2.9
Tarmac	Toplite GTI 2.9	2.9
Tarmac	Durox Supabloc	3.6
Thomas Armstrong	Airtec XL	2.9
Thomas Armstrong	Airtec Standard	3.6
Tarmac	Toplite Standard	3.6

If your block type varies please contact our Technical Services Team

STANDARD AIRCRETE		≤0.15 W/mK
Manufacturer	Block	Compressive Strength (N/mm ²)
Forterra	Thermalite Shield	3.6
H+H (Celcon)	Standard Grade	3.6
Mannok	Super Blocks	2.9

If your block type varies please contact our Technical Services Team

HIGH STRENGTH AIRCRETE		≤0.19 W/mK
Manufacturer	Block	Compressive Strength (N/mm ²)
Forterra	Thermalite Hi Strength	7.3
H+H (Celcon)	High Strength	7.3
H+H (Celcon)	Super Strength	8.7
Mannok	Standard Blocks	5.2
Mannok	Seven Blocks	7.5
Tarmac	Toplite 7	7.3
Tarmac	Durox Supabloc 4	4.2
Tarmac	Durox Supabloc 7	7.3
Tarmac	Durox Supabloc 8	8.7

If your block type varies please contact our Technical Services Team

MEDIUM DENSE		≤0.45 W/mK
Manufacturer	Block	Compressive Strength (N/mm ²)
Besblock	Insulite	7
Broome Bros	Donlite 3.6	3.6
Broome Bros	Donlite 7.3	7.3
Forterra	Fenlite	10.4
Thomas Armstrong	Insulite	7.3
Stowell	Stowlite	7.3

If your block type varies please contact our Technical Services Team

DENSE		≤1.13 W/mK
Manufacturer	Block	Compressive Strength (N/mm ²)
CCP	Consolite	7.3
Hillhouse Quarry group	Carrickcrete 7.3	7.3
Hillhouse Quarry group	Carrickcrete 10.4	7.3
Laird Bros	Lunacrete	7.3
Masterblock	Masterdenz	7.3
Newlay	Newcon	7.3
Quarries Ltd	Standard Dense 7.3	7.3
Quarries Ltd	Lightweight	7.3
S Morris	Dense Solid	7.3
S Morris	Med Dense Solid	7.3
Sellite	Standard Concrete	7.3
Thomas Armstrong	Solid Dense	7.3
WD Lewis	Dense Aggregate	7.3

If your block type varies please contact our Technical Services Team

PIR Thermal Conductivity	PIR Brand
0.022 W/mK	Celotex CW4000
	Kingspan TW50
	Xtratherm XT CW
	Ecotherm Eco Cavity
0.021 W/mK	Mannock QW-Cavity Wall
	Xtratherm XT CWP