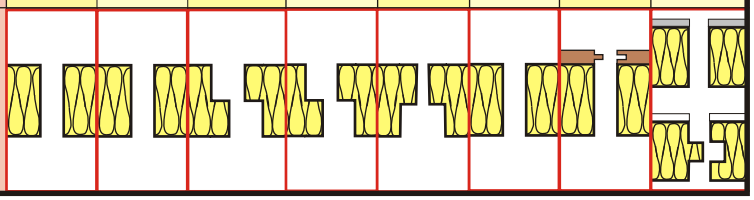
Physical Properties - Floor insulation (thermal)

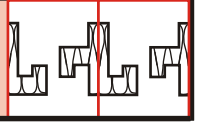
Cellecta's insulation products are manufactured to the highest possible specification. All products' physical properties are determined under strictly controlled laboratory conditions in accordance with the European Standards.

Properties[1]	Standard	Unit	X2i	X3i	X4L	X7L	TETRiS	XES	XCHiP[3]	XCPL[4]
Thermal conductivity	BS EN 12667: 2001	W/mK	0.029	0.029	≤60mm 0.030 70-80mm 0.032 ≤90mm 0.033	50mm 0.034 >50mm 0.038	0.029	0.029	0.029	0.029
Compressive strength[2]	BS EN 826	kPa	≤40mm 250 ≥50mm 300	350	480	700	320	≤40mm 250 ≥50mm 300	280	300
Grade	BS EN 826	–	CS250 CS300	CS300	CS400	CS700	CS300	CS250 CS300	CS250	CS300
Long-term water absorption by immersion	BS EN 12087	% Volume	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%	<0.7%	<0.5%
Water vapour diffusion factor	BS EN 12086		100-200	100-200	100-200	100-200	100-200	100-200	100-200	100-200
Capillarity	–	–	None	None	None	None	None	None	None	None
Density	BS EN 1602	kg/m^3	30	34	40	40	40	30	30	30
Temperature range	–	°C	-50/+75	-50/+75	-50/+75	-50/+75	-50/+75	-50/+75	-50/+75	-50/+75
Surface finish	–	– –	Skin Skin	Skin Skin	Skin Skin	Skin Skin	Skin Skin	Skin Skin	P5 Chipboard Planed	Reinforced high impact cementitious board or glasroc multiboard Skin
Size: Width		mm	600	600	600	600	300 500 600	Cut to suit up-stand height	600	1200
Length		mm	2500	2500	1250	1250	2500	2500	2400	2440
Standard thickness'		mm	20, 25, 30, 35, 40, 50, 60, 65,70, 75, 80, 90,100	40, 50, 60, 70, 75, 80, 90, 100, 120	50, 60, 70, 75, 80, 90, 100, 120	50, 60, 80	80, 90, 100, 120	20, 25, 30, 35, 40, 50, 60, 65 70, 75,	18 (chipboard) + 25, 30, 40, 50 60, 70, 75, 80, 100, 110	6 + 50, 60, 65, 70, 75, 80, 90, 100, 120
Edge profile		-	Square	Square	Shiplap	Shiplap	Rebated	Square	T & G	Square or T & G
Edge detail		-								

Accepted

NHBC Accepted

(1) Physical properties of extruded polystyrene core
(2) Minimum value at 10% compression
(3) Faced with a 18mm P5 moisture resistant chipboard with a thermal conductivity of 0.14W/mK.
(4) Faced with a 6mm class O high impact reinforced cement building board) with a thermal conductivity of 0.41W/mK or a 6mm class O white glasroc multiboard with a thermal conductivity of 0.29W/mK.

Properties	Standard	Unit	STIROFLOOR F5	STIROFLOOR F7.5
Thermal conductivity	BS EN 12667: 2001	W/mK	0.035	0.035
Compressive strength	BS EN 826	kPa	150	150
Long-term water absorption by immersion	BS EN 12087	% Volume	<5%	<5%
Temperature range	–	°C	-50/+75	-50/+75
Surface finish	–	–	Plastic coated nodules to accept 15-18mm pipe	Plastic coated nodules to accept 16-20mm pipe
Size: Width Length		mm mm	700 1200	700 1350
Standard thickness'		mm	45, 60	45, 60
Edge profile		-	Overlock	Overlock
Edge detail		-		

All *Cellecta's* extruded polystyrenes have excellent properties which will last the life of the building:

- Excellent thermal performance
- CFC & HCFC free
- Zero ODP
- High compressive strength
- Very low water absorption
- Closed-cell structure

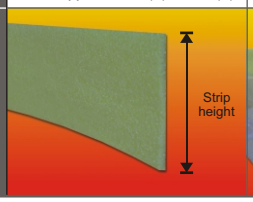
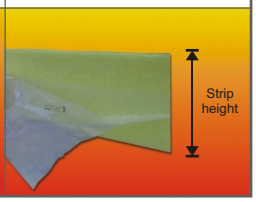
TETRiS insulation blocks have undergone rigorous testing by the Building Research Establishment to confirm its technical performance and application suitability, and has been awarded BRE certification. The use of TETRiS is also accepted by the NHBC & Zurich Assurance.

BRE Certification Limited 093/02

Physical Properties - Floor insulation (thermal)

Flexible Thermal Edge Strips

The thermal efficiency of the floor can be adversely affected should contact be made between the floor screed and the surrounding structure (known as cold bridging). To eliminate cold bridging *Cellecta* manufactures an extensive range of flexible extruded polyethylene edge strips to suit a multitude of construction details.

Strip type	YELO*fon* ES5/10	YELO*fon* ES BPF
Description	Extruded polyethylene foam roll	Extruded polyethylene foam roll with perforations and bonded polythene flange
Dimensions	**5mm(t)** x100mm(h) x 50m(L) **5mm(t)** x120mm(h) x 50m(L) **5mm(t)** x150mm(h) x 50m(L) **10mm(t)** x100mm(h) x 50m(L) **10mm(t)** x150mm(h) x 50m(L)	**5mm(t)** x100mm(h) x 50m(L) **5mm(t)** x150mm(h) x 50m(L) **10mm(t)** x 150mm(h) x 50m(L) (with self adhesive backing)
Profile		

(1) Special size flanking strips manufactured to order, subject to minimum quantity.

PHYSICAL PROPERTIES

YELO*fon* edge strips are manufactured to the highest possible specifications, their physical properties are determined under strictly controlled laboratory conditions.

Property	Standard	Unit	YELO*fon* ES
Thickness'	-	mm	5 &10(2)
Density	BS EN ISO 845	kg/m^3	27
Water absorption	BS EN ISO 2896	%-vol	< 5
Maximum working temperature	-	°C	75
Thermal conductivity	BS EN ISO 2581	W/mK	0.045

(2) 8mm and 12mm manufactured to order, subject to minimum quantity

All *Cellecta's* extruded polyethylenes have excellent properties which will last the life of the building:

- High thermal performance
- CFC, HCFC & HFA free
- Zero ODP
- Low GWP (<5)
- Very low water absorption
- Closed-cell structure

NHBC Accepted

Z Accepted