



EH Smith
Porotherm System Distributors

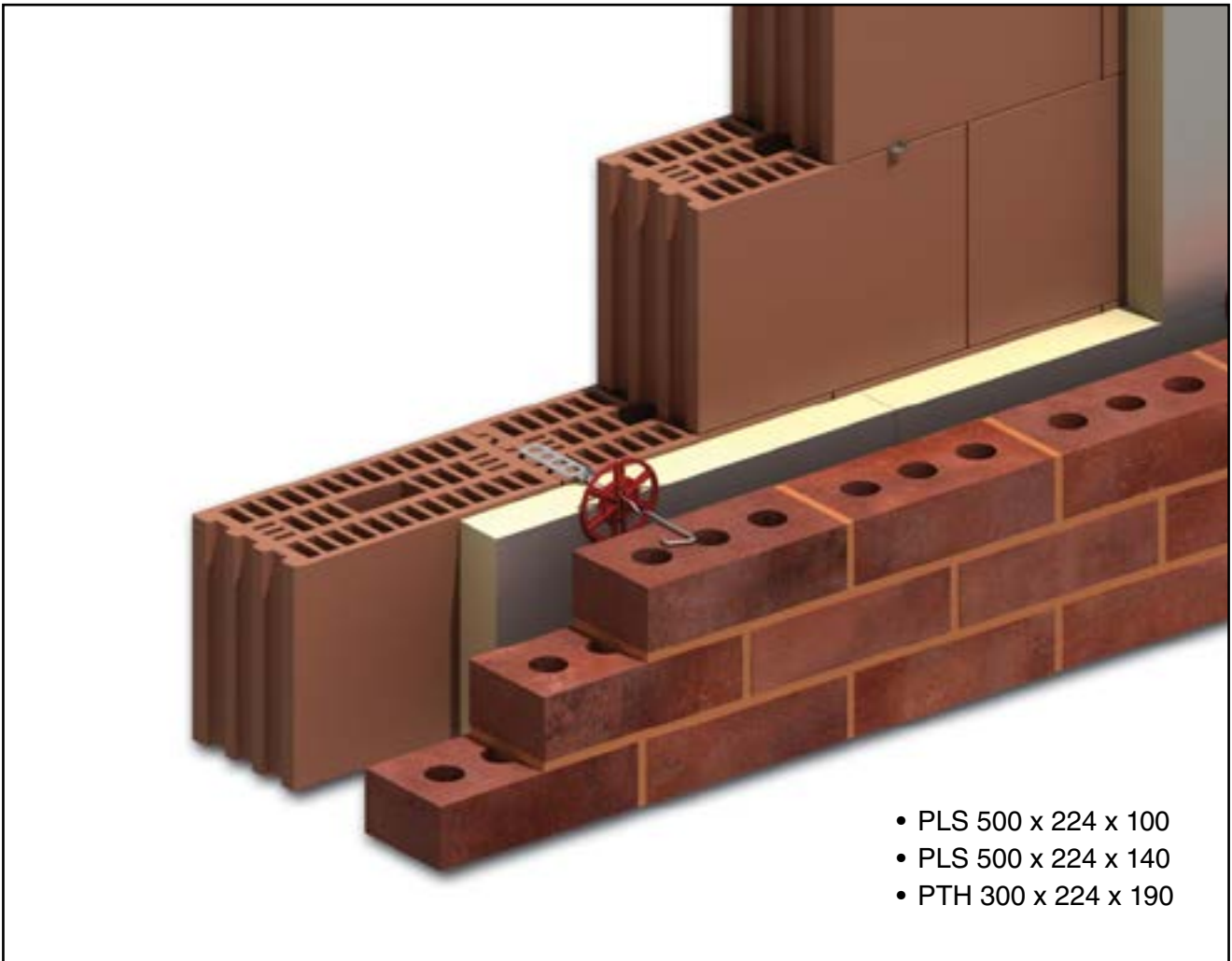


 **Porotherm®**

**A Masonry
Frame Solution**



- ✓ Multi cellular clay block walling system
- ✓ Modern (thin) jointing method
- ✓ Precision engineered blocks
- ✓ Horizontal faces ground to $\pm 0.5\text{mm}$
- ✓ All Blocks 10n/mm^2



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STRONGER. SAFER.**



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System Benefits

- ✓ Reduced cost of building
- ✓ Reduced build time
- ✓ Flexibility & control over build programme
- ✓ 95% Water reduction
- ✓ Cold weather working to 0°
- ✓ Better overall quality buildings
- ✓ Free next day delivery
- ✓ 20+ Metres for movement joints
- ✓ Suitable to be used with pre cast concrete planks



Plus much more...

We Offer...

RIBA approved **CPD's** | **FREE** System Training

Scheme Consideration Documents | Full on-site Mason Support



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“ Porothersm is a masonry frame solution. ”



Porothersm provides the option to build the inner skin up to two stories ahead, allowing installation of concrete floors & removing the external skin from critical path.



Stage A



Stage B



Stage C



Stage D

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Principal Parameters for Engineering Design with Porotherm							
Block Type	Porotherm Blocks						
	PLS 100		PLS 140		PTH 190		SP148
Dimensions $w \times h \times l$ mm	100 x 224 x 500		140 x 224 x 500		190 x 224 x 300		SP148
Typical Block Strength (N/mm ²)	10		10				See Notes below PLS100 * PLS140 **
Characteristic Compressive Strength of Masonry (N/mm ²)	6.5		5				
Typical Block Strength (N/mm ²)					10		SP148
Characteristic Compressive Strength of Masonry (N/mm ²)					4.5		SP148
Flexural Strength (N/mm ²)***	Parallel	Normal	Parallel	Normal	Parallel	Normal	
	0.8	0.3	0.55	0.2	0.5	0.15	SP148
Shear Strength***	f _{vko}	A	f _{vko}	A	f _{vko}	A	
	0.20	0.20	0.15	0.2	0.15	0.20	SP148
Gross Density kg/m ³	950		850		850		SP148
Laid Weight kg/m ²	96.4		120.9		164.4		Calculated from dry density and Zeroplus/ Ecoparge usage rates.
Laid Weight/m ² – Ecoparge to one face kg/m ²	97.85		122.5		165.9		
Group (to EN 1996-1-1)	2		2		2		SP148
Mean Mortar Strength N/mm ² Compression Zeroplus	13.3						Ceram Test Report
Mean Mortar Strength N/mm ² Flexure ZeroPlus	2.6						
Mortar Class for Lateral Load Design ZeroPlus	M12		M12		M12		SP148
Mortar Adhesion Zero plus N/mm ²	0.3						By reference to fixed value in Annex C BSEN-2-2010
Mortar Method of Test Zero plus to BSEN 1015-11	MC						Ceram
Mortar for base course Sand/Cement – Minimum Class (unless otherwise specified by Structural Engineer)	M4		M4		M4		

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Ancon Wall Ties	Cavity Width	Type at 900mm x450mm	Tie Wire Diameter mm	Use	
Ext. Cavity Wall					Source
CCB3 -100	≤ 100	3	3.3	Porotherm to Brick	SP 148/Ancon Building Products
CCB4 -125	100 ≤ 125	4	3.3		SP 148/Ancon Building Products
CCB4 -150	125 ≤ 150	4	3.3		SP 148/Ancon Building Products
CCB JJ- 260	100	3	N/A	Porotherm to Porotherm	Ancon Building Products
CCBJJ- 285	125	3	N/A		Ancon Building Products
CCB JJ- 310	150	3	N/A		Ancon Building Products
CCB JJ -335	175	3	N/A		Ancon Building Products
CCB JJ- 360	200	3	N/A		Ancon Building Products
Party Wall	Cavity Width	Type	Tie Wire Diameter mm		
CCBA - 75	75	A	3.3	Porotherm to Porotherm	SP 148/Ancon Building Products
CCBA - 100	100	A	3.3		SP 148/Ancon Building Products
CCBA - 110	110	A	3.3		Ancon Building Products

Notes:

SP148 refers to:

Lucideon (Ceram) Technical Report and Design Guidance for the Use of Porotherm Blocks in the UK Special Publication SP148

*Test Report for PLS 100 – Lucideon 172477 (QT43840/2/JPS)/Ref. 1/CR3

** Test Report for PLS 140 – Lucideon 172478 (QT43840/2/JPS)/Ref. 1

***With Zero-Plus Mortar

Design Software

Both TEDDS and Masterseries software support the design of Porotherm.

TEDDS incorporates Porotherm properties within the dropdown boxes within the software.

Masterseries requires all performance values to be input as for all other materials that the software supports.

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**Porotherm BLOCK (Loads)**

3rd Floor:	100 10N 247kg/lm
2nd Floor:	100 10N 247kg/lm
1st Floor:	100 10N 247kg/lm
Grd Floor:	100 10N 247kg/lm
Foundation:	988kg/lm

Concrete BLOCK (Loads)

3rd Floor:	100 3.6N 369kg/lm
2nd Floor:	100 7N 390kg/lm
1st Floor:	100 7N 390kg/lm
Grd Floor:	100 10N 398kg/lm
Foundation:	1547kg/lm

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- ✓ Extensively tested at Lucideon, one of the UK's leading UKAS accredited laboratories
- ✓ Detailed Design Guide and Technical Manual available
- ✓ POROTHERM complies with BS EN 771-1:2003 and carries a CE mark
- ✓ POROTHERM has NHBC and LABC acceptance
- ✓ A handbook of Thermal Bridging Details, Prepared by the BBA
- ✓ Robust Details E-WM-25 and E-WM-29

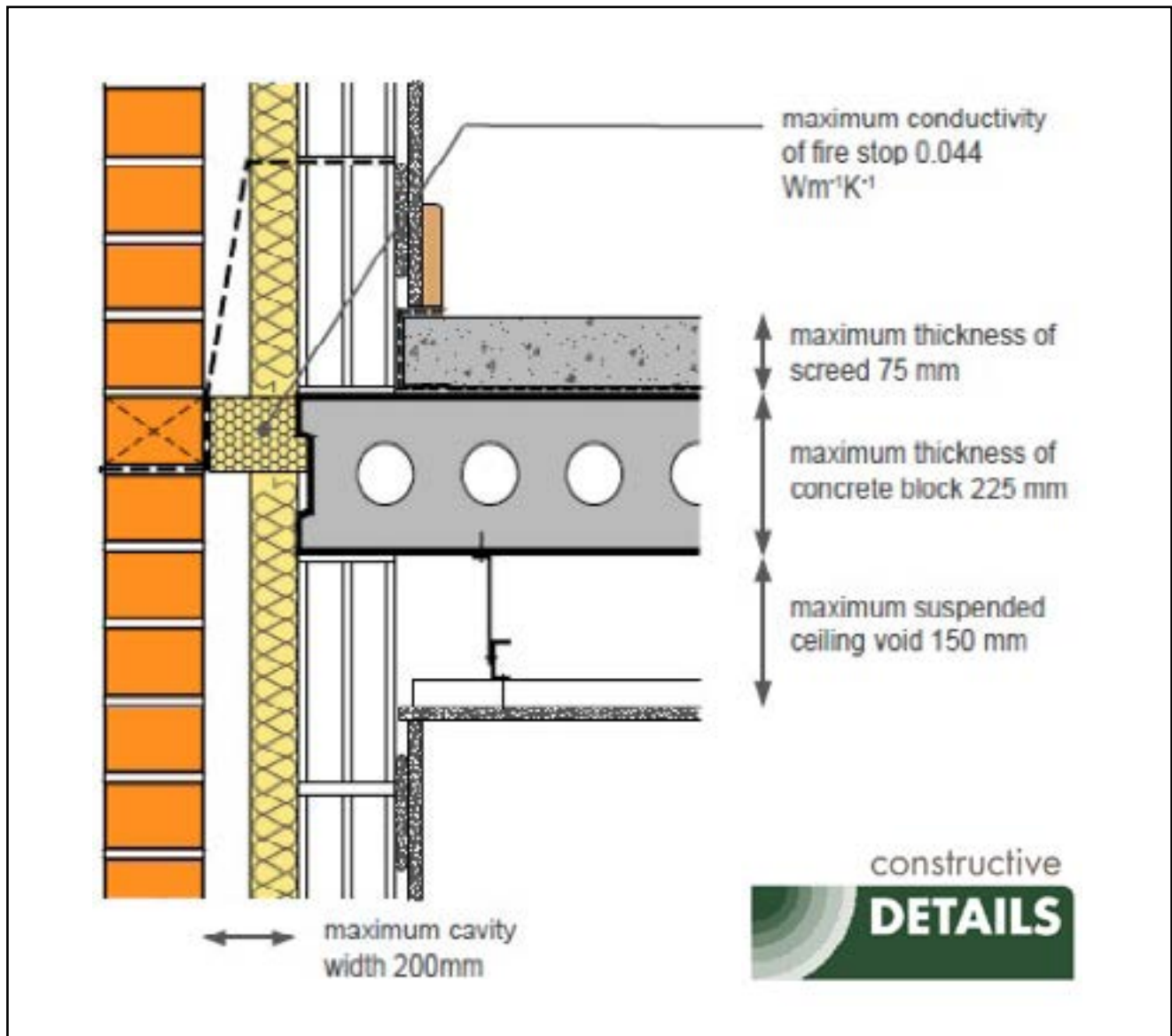


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A Handbook of Thermal Bridging details incorporating Porotherm Blocks is available to download.

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**Porotherm®**

The Clay Block Walling System

porothermuk.co.uk**Porotherm®**
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