

KOOLTHERM PHENOLIC PIPE SUPPORTS



Product Description

Kingspan Kooltherm pipe supports are available in a wide range of pipe diameters and insulation thicknesses. Manufactured from high density closed cell phenolic foam giving optimum insulation performance and load bearing capacity for pipework. Kooltherm pipe supports are faced with durable aluminium foil with a self-adhesive closure strip to provide an effective vapour barrier seal. Sizes for pipes 48mm and above include load bearing metal spreader plates in one half of the block.

Applications

Kooltherm pipe supports are designed to support the compressive loads of pipework carrying water or other liquids and isolate the pipework from the pipe support brackets to limit heat transfer and thermal bridging and maintain a continuous vapour barrier through the system.

Kooltherm pipe supports are typically used with LTHW and CHW pipework systems and may be used with a wide range of pipe types including steel, stainless steel, carbon steel, copper, multiplex and plastic.

Certification

CE Marked in accordance with BS EN 14314

Technical Data

- Material: CFC free closed cell phenolic foam
- Insulation Density: ≤ 67mm O.D. 60kg/m³; 76-140mm O.D. – 80kg/m³; ≥ 168mm O.D. 120kg/m3
- Insulation Length: ≤140mm O.D. 99mm; ≥ 168mm
 O.D. 124mm
- Metal Spreader Plate: on sizes ≥ 48mm O.D.
- Thermal Conductivity (W/mk): 60kg/m³ 0.032; 80kg/m³ - 0.036; 120kg/m³ - 0.045
- Pipework Operating Temperature: 50°C to + 110°C

Reaction to Fire

Kooltherm pipe supports have a densely cross-linked structure that makes them difficult to ignite when subjected to fire. The outer layer forms a strong carbonaceous layer that limits heat generation and retards further flame spread.

Kooltherm pipe supports have excellent fire and smoke performance characteristics achieving a European Reaction to Fire performance of $B_L - s1$, dO



Midland Fixings Ltd The Parrs, Lilac Grove, Beeston Nottingham NG9 1PJ

PRODUCT DATA SHEET



Product Table

		INSULATION THICKNESS												
CODE	COPPER SIZE	STEEL SIZE	15		20		25		30		40		50	
			MF CODE	BOX QTY										
KPC015**	15		11390151	120	11390152	80	11390153	55	11390154	42	11390155	25		
KPC022**	22	1⁄2"	11390221	96	11390222	67	11390223	45	11390224	36	11390225	20	11390226	18
KPC028**	28	3/4"	11390281	76	11390282	55	11390283	42	11390284	30	11390285	20	11390286	15
KPC035**	35	1"	11390351	64	11390352	48	11390353	34	11390354	37	11390355	20	11390356	10
KPC042**	42	1¼"	11390421	54	11390422	40	11390423	31	11390424	24	11390425	16	11390426	10
KPC048**		1½"	11390481	54	11390482	32	11390483	25	11390484	22	11390485	14	11390486	10
KPC054**	54		11390541	35	11390542	25	11390543	22	11390544	18	11390545	13	11390546	8
KPC060**		2"			11390602	26	11390603	20	11390604	16	11390605	10	11390606	9
KPC067**	67				11390672	20	11390673	16	11390674	14	11390675	10	11390676	8
KPC076**	76	2½"			11390762	22	11390763	15	11390764	12	11390765	10	11390766	8
KPC089**		3"			11390892	12	11390893	12	11390894	10	11390895	7	11390896	5
KPC108**	108				11391082	12	11391083	10	11391084	9	11391085	7	11391086	5
KPC114**		4"					11391143	12	11391144	10	11391145	8	11391146	6
KPC140**		5"					11391403	8	11391404	7	11391405	6	11391406	4
KPC168**		6"					11391683	7	11391684	6	11391685	5	11391686	4

** Add insulation thickness to complete code





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Load Bearing Calculations

Steel Pipe

S	TEEL PIPE SIZ	E		KOOLTHERM® INSULATED PIPE SUPPORT INSERTS					
NB (IN)	NB (MM)	OD (MM)	LENGTH (MM)	MAX. LOAD (KG)	SPREADER PLATE (MM)	SUPPORT DISTANCE (M)	DENSITY (KG/M³)		
1/2	15	21.3	99	12	none	3	60		
3/4	20	26.9	99	15	none	3	60		
1	25	33.7	99	19	none	3	60		
11⁄4	32	42.4	99	23	none	3	60		
1½	40	48.3	99	27	1.0	4	60		
2	50	60.3	99	33	1.0	4	60		
21/2	65	76.1	99	62	1.0	4	80		
3	80	88.9	99	73	1.0	4	80		
4	100	114.3	99	94	1.0	4	80		
5	125	139.7	99	115	1.0	6	80		
6	150	168.3	124	410	1.5	6	120		
8	200	219.1	124	534	1.5	6	120		
10	250	273.0	124	666	1.5	6	120		
12	300	323.9	200	1265	2.0	4	120		
14	350	355.6	200	1389	2.0	4	120		
16	400	406.4	200	1585	2.0	4	120		
18	450	457.0	200	1784	2.0	4	120		

Values given are based upon Kooltherm® Insulated Pipe Support Inserts with an integral metal spreader plate where specified in the table above.

Copper Pipe

COPPE	R PIPE SIZE	KOOLTHERM® INSULATED PIPE SUPPORT INSERTS							
OD (MM)	LENGTH (MM)	MAX. LOAD (KG)	SPREADER PLATE (MM)	SUPPORT DISTANCE (M)	DENSITY (KG/M³)				
15	99	9	none	3	60				
22	99	12	none	3	60				
28	99	15	none	3	60				
35	99	19	none	3	60				
42	99	23	none	3	60				
54	99	30	1.0	4	60				
67	99	45	1.0	4	60				
76	99	62	1.0	4	80				

Values given are based upon Kooltherm® Insulated Pipe Support Inserts with an integral metal spreader plate where specified in the table above.



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Installation Instructions



Kooltherm™ Insulated Pipe Support Inserts shall be fully coated with an appropriate joint sealant.



The longitudinal joints of the Kooltherm™ Insulated Pipe Support Inserts shall also be fully coated with the joint sealant.



The Kooltherm™ Insulated Pipe Support Inserts are placed on the pipe. Support inserts on horizontal lines are to be insulated with the longitudinal joints facing sideways.





tape.



A flexible squeegee is used to ensure a vapour tight and lasting adhesion between the tape and the aluminium foil vapour barrier jacket.



When the clamp is installed, care must be taken that the aluminium foil vapour barrier jacket of the Kooltherm[™] Insulated Pipe Support Inserts is not damaged in any way.



When the adjoining Kooltherm™ Pipe Insulation sections are in place, the coinciding circumferential joints shall be vapour sealed with an appropriate self-adhesive aluminium foil vapour barrier tape.



All circumferential seals shall be thoroughly rubbed with a flexible squeegee to ensure a proper vapour tight and lasting adhesion between the tape and the aluminium foil vapour barrier jacket.



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