KIMMCO

means insulation!

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KIMMCO Self-Seal





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KIMMCO SELF-SEAL

Product Description

KIMMCO Self Seal is a self-adhering Glasswool board for thermal and acoustic insulation of HVAC ducts, which completely eliminates the use of liquid and flammable glue, improves greatly the ease and speed of installation and saves installation cost and time.

Product Range

KIMMCO Self Seal is currently available as a value addition to the following existing KIMMCO fibreglass insulation products:

HVAC ducting Applications:

- KIMMCO Duct Insul (KDI)
- KIMMCO Duct Insul Plus (KDIP)
- KIMMCO Clean Liner (KCL)

Product Density & Dimensions

A. Boards

Density (kg/m ³)	Thickness (mm)	Length (m)	Width (m)
24	50 - 100		
32 & 36	40 - 100	1.0	1.2
40	30 - 100	1.0	1.2
48 - 96	25 - 100		

B. Blanket

Density (kg/m³)	Thickness (mm)	Length (m)	Width (m)
32	25- 75	5-10*	1.0
48	25 - 50	* Length varies according to thickness and density.	1.2

Nonstandard sizes may be available upon request.

About Self-Adhesive Tape

The reinforced adhesive tape, covers 100% of the substrate resulting in adhesive strength that outperforms (>5 times) that of conventional glues. The exceptional adhesive strength eliminates the need for any supplementary mechanical fixation.

No Corrosion

Does not cause or accelerate corrosion of steel, copper or aluminum.

Combustibility

Base fibers are non combustible when tested in accordance with BS 476 (part 4), ASTM E136.

Thermal Conductivity

Thermal conductivity according to BS 874, ASTM C177, 518; ISO 8301, 8302 or DIN 52612 are described in tables below:

Mean Temperature	Thermal Conductivity in W/m.K for the following densities in kg/m ³						
°C	24	32	36	48	64	80	96
0	0.031	0.030	0.029	0.029	0.030	0.031	0.031
10	0.032	0.031	0.030	0.030	0.031	0.033	0.033
25	0.035	0.033	0.032	0.031	0.032	0.035	0.035
50	0.039	0.037	0.036	0.035	0.036	0.037	0.037
75	0.043	0.040	0.039	0.037	0.038	0.040	0.040
100	0.047	0.044	0.043	0.041	0.043	0.043	0.043

Mean Temperature	Thermal Conductivity in Btu.in/ft²h.F for the below densities in Lbs/ft³						
°F	1.500	2	2.250	3	4	5	6
32	0.21	0.20	0.20	0.20	0.21	0.21	0.21
50	0.22	0.22	0.21	0.21	0.23	0.23	0.23
77	0.24	0.23	0.22	0.22	0.23	0.24	0.24
122	0.27	0.25	0.25	0.24	0.25	0.26	0.26
167	0.30	0.27	0.27	0.26	0.27	0.29	0.28
212	0.33	0.30	0.30	0.29	0.30	0.30	0.30

Fire Safety

 $\ensuremath{\mathsf{KIMMCO}}$ Glasswool Self Seal Boards achieved the following fire safety ratings.

Test	Result
BS 476, part 6 and 7; surface spread of flame	Class 0
ASTM E 84: system tunnel test	Class A (1) Flame spread 25; Smoke density 0

Verified by 3rd party testing laboratories in the USA.

Aging

KIMMCO Glasswool Self Seal Boards successfully passed aging tests by PSB testing laboratory in Singapore.

APPLICATIONS

KIMMCO Self Seal is typically used for thermal, acoustic Insulation for HVAC ducting.

Installation procedures

- For Thermal insulation of HVAC Ducts.
- Prior to use, store in cool conditions so that self seal adhesive returns to normal state, to deliver maximum adhesive performance.



- Measure duct dimensions as 'x' for duct width and 'y' for duct height.
- 2. Total of four pieces are required.
- 3. Determine the length for two pieces of the Board as below: Length of board = x + 2 times of thickness of Board + 50mm.
- Using straight knife, cut above 2 pieces in required length from the board.
- Please mark a line on the edge of cut length at distance of 25mm from the edge.
- 6. Cut along the line through insulation only. Do not cut through or score the facing.
- 7. Peel the insulation from the flap.
- 8. Please mark a line on the other edge of cut length at distance of 25 mm from the edge.
- 9. Repeat steps 6 & 7
- 10. First section is now ready for assembly.
- 11. Repeat steps 5 to 9.
- 12. Second section is now ready for assembly.
- 13. Determine the length for remaining two pieces of the Board as below: Length of board = y
- Using straight knife, cut above 2 pieces in required length from the board.
- 15. Third and fourth sections are now ready.
- Clean all duct surfaces thoroughly to ensure that the surface is dry and free from dust or grease.
- 17. Remove the liner from all the board pieces prepared above.
- 18. Place first piece of board (after removing the liner from it) keeping the Vapor Barrier (facing) up on duct width 'x' side centrally (length equivalent to board width along with facing flap will be equally projected out both side). Apply sufficient hand pressure to ensure that the Boards are firmly stuck on to the Duct surface.

- 19. Repeat steps 19 to 21 using second piece of board for the opposite of width 'x' side
- 20. Repeat steps 19 to 21 using third piece of board for height 'y' side.
- 21. Make sure that the edge joints are closely butted and ends are flushed and sealed.
- 22. Pull the flap from first piece and stick over third piece with the help of aluminium tape.
- 23. Apply 3" suitable tape (Aluglass tape in case of Aluglass facing and aluminium tape in case of FSK facing) on the joints by positioning the tape along the longitudinal edge of the flap to allow 1" overlap on adjacent surface. Rub the tape firmly to ensure good sealing on the Boards.
- 24. Repeat steps 25 and 26 for other side by pulling flap from second piece.
- 25. Repeat steps 19 to 21 using fourth piece of the board for the opposite of height 'y' side
- 26. Repeat steps 24 to 27.
- 27. Apply facing wire, for additional security, around the duct at 500mm interval. Apply 2" aluminium/Aluglass tape over the wire to give a good aesthetic appearance and protect the facing wire from corrosion.

Handling & storage

- Self Seal Boards should be stored inside, in a well-lit, dry, cool and protected area.
- Self Seal Boards should be kept in original packaging to avoid penetration of moisture and dust or foreign contamination
- All packages should be elevated above the ground or slab, away from the walls, and stored on a flat surface. This helps prevent contact with water and allows air to circulate in and around the insulation.
- If stored outside and in open area, packages should be protected with a polyethylene film, canvas or other type of covering.
- Material should be kept dry and protected from the elements.
- Please ensure that temperature in the storage area should not be high as the polyethylene sheathing used for packaging will soften and loose its strength when temperatures exceed 220°F (104°C).
- The easiest way to avoid damaging the insulation is to arrange delivery so that it can be installed as soon as it arrives.
- Prior to use, store in cool conditions so that Self-Seal adhesive returns to normal state, to deliver maximum adhesive performance.

