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Recommended Engineers Specification

for TK Series of Lineset Pipe supports by Inaba Denko

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Background.

On all VRF/VRV air conditioning installations, there is a strong possibility that, in vertical installations, thermal expansion of the copper pipe may place undue stress on the pipe fitting at the lower extremity of the lineset, usually causing it to become deformed.

This would cause a restriction, resulting in loss of efficiency, with the further possibility that the wall of the fitting could fracture or crack, resulting in a disastrous loss of refrigerant gas.

Refrigerant Linesets

When vertical runs of refrigerant lineset up to and including 164 feet (50 meters) in length are required, each pipe shall be supported at its midpoint by a specially designed, appropriately sized pipe support assembly which is designed to reduce the potential expansion by 50%, thus reducing the risk of deformation due to expansion.

Where the length of the lineset exceeds 164 feet (50 meters) the use of an expansion loop may be required in conjunction with the support assembly and in these cases it will be necessary to consult with the technical office of the manufacturer to design a special configuration specifically for the installation in question.

The pipe support assembly shall be secured to the copper lineset pipe strictly in accordance with the manufacturer's installation instructions.

The pipe support assembly shall be secured to the vertical wall of the building with the appropriate mounting bracket, strictly in accordance with the manufacturer's installation instructions, ensuring that the underlying wall surface is sufficiently stable to carry the load and that the fixings used are sized accordingly.

To preserve the integrity of the lineset insulation, the entire fitting/bracket assembly shall be covered with a tailored Tee shaped insulation sleeve which shall be secured with a weatherproof closure.

Manufacturer

The support assembly shall be the TK Series pipe support system.

The mounting brackets shall be TK-U, TK-K or TK-B.

The insulation sleeve shall be TK-H.

All as manufactured by Inaba Denko of Osaka, Japan, or equal.

These products are distributed by Marketair Inc. 402 Merrywood Drive, Edison NJ 08817, Tel: (732) 985-8226, Fax: (732) 985-2134, email gerry@marketair.com, Website: www.marketair.com.