**Note to users: items shown in red indicated edits / selections that need to be made to tailor the specification for the application.**

**VRF Metraloop.**

Product Specifications

1. General
   1. Provide flexible hose expansion loop(s) as indicated on the contract drawings or as required to accommodate any thermal expansion or contraction.
   2. Flexible hose expansion loops shall be manufactured complete with two parallel sections of corrugated metal house, compatible braid, 180⁰ return bend, with inlet and outlet connections. Field fabricated loops shall not be acceptable.
   3. Flexible hose expansion loops shall impart no thrust loads to system support, anchors or building structure.
2. Products
   1. Flexible hose expansion loops to be "**VRF** **Metraloop**®” as manufactured by The Metraflex Company®, Chicago, IL.
   2. Corrugated Hose shall be Type 321 stainless Steel.
   3. Braid shall be double layer of type 304 Stainless Steel.
   4. Fittings shall be Sch 40 S Type 304 Stainless in accordance with ASTM A240.
   5. Copper pipe systems, the VRF Metraloop shall be equipped with a stainless-steel to copper conversion fitting with XHP copper stub ends.
   6. Flexible hose expansion loops shall have a factory supplied; hanger / support lug located at the bottom of the 180⁰ return.
3. Execution
   1. Install and guide per manufacturers’ installation instructions and Mechanical Contractors Association of America “Guidelines for Quality Piping Installations”.
   2. Flexible hose expansion loop return fitting shall be supported to allow movement.