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 Effective Date: July 11, 2019

# Instructions:

Insert these specifications in section 23 21 13 – Hydronic Piping where applicable. Additionally, request a CAD detail from your Nexus Valve representative for your stainless steel braided hoses and flow control valve piping detail.

**General:**

Contractor shall provide and install stainless steel braided hoses at all locations as specified in the construction documents.

**Stainless Steel Braided Flexible Hoses:**

1. Hoses shall be made of stainless steel braid over Kevlar reinforced EPDM for sizes ½” through 1” and Rayon reinforced EPDM for sizes 1¼” through 2”. 2½” and larger hoses shall be stainless steel braid over stainless steel tube. Hoses constructed with thermoplastics or EPTF is not acceptable.
2. Hoses shall be designed for a minimum 400 PSIG working pressure for sizes ½” – 1” and 300 PSIG working pressure sizes 1¼” – 2”; and 5 to 248 degrees F. operating temperature. 2½” hoses shall be designed for a minimum 300 PSIG work pressure at 500 degrees F. Minimum burst pressure shall be four times the working pressure.
3. Hoses shall meet or exceed ASTM E 84-00 fire rating for building materials (NFPA 255, ANSI/UL 723 & UBC 8-1). Hoses rated UL 94 V-O for plastics used in manufacturing of consumer electronic products is not acceptable.
4. Hoses shall be of double swivel design for sizes ½”, ¾” and 1”; and MNPT x swivel for sizes 1¼”, 1½” and 2”. Sizes 2½” and larger shall be a MNPT x MNPT connection type.
5. End fittings ½” through 2” shall be made of brass. Sizes 2½” and larger shall be made of schedule 40 carbon steel. Swivel connections are to be sealed with an EPDM washer or FKM o-ring. Metal to metal seals or fiber gasket seals are not acceptable.
6. Hose adapters shall be provided where necessary. Hose adapters shall be brass with MNPT threads pre-coated with LocTite 516 thread sealant, Copper sweat or Push.
7. Ferrules shall be stainless steel for sizes ½” through 2”. Sizes 2½” and larger shall be stainless steel bellows design clad.
8. Hoses shall be permanently marked so that the manufacturer of the hose is easily identified. Hoses shall also be permanently marked with pressure rating, temperature rating and date of manufacture.
9. Hoses shall carry a minimum 5-year product warranty.
10. Approved Manufacturers:

 Nexus Valve, Inc.