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Product Specifications

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

**Flexible Pipe Loops for Drain, Waste, Vent, and Sewage Applications.**

1. General
2. Provide DWV flexible hose expansion loop(s) as indicated on the contract drawings or as required to accommodate any thermal expansion, contraction, building movement or seismic movement of the piping system. Flexible pipe loops shall be rated for the movement as shown on the schedule.
3. DWV 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.
4. DWV flexible hose expansion loops shall include two cleanouts.
5. DWV flexible hose expansion loops shall be capable of movement in the ±X, ±Y, and ±Z planes.
6. DWV flexible hose expansion loops shall impart no thrust loads to system support, anchors or building structure.
7. All flexible hose Dog Legs shall be manufactured in accordance with the documented manufacturers weld procedure specifications in accordance with ASME Section IX.
8. All flexible hose expansion loops shall be manufactured in accordance with ASME / ANSI B31.1
9. Products
10. DWV flexible hose expansion loops to be "DWV Metraloop®” as manufactured by The Metraflex Company®, Chicago, IL.
11. DWV flexible hose expansion loops shall be listed for DWV service in accordance to IAPMO IGC 304.
12. Sections of flexible hose shall be oversized with eccentric connections to fittings and be furnished with a liner.
13. Materials;
	1. Fittings shall be Sch. 40S, Type 304 Stainless Steel in accordance with ASTM A240.
	2. Corrugated Hose; Type 321 Stainless Steel,
	3. Braid; Type 304 Stainless Stee in accordance with ASTM A240.
	4. Liners shall be Type 304 Stainless Steel and comply with ISO 15465
	5. End fittings shall be:
		1. Floating flanges.
			1. Flange shall be Type 304 Stainless steel in accordance with ASTM A240 with 150 lb. drilling in accordance with B16.5
			2. Backing ring shall be Type B in accordance with MSS SP-6 made from Sch 40S Type 304 Stainless steel in accordance with ASTM A240.
		2. No hub connections shall be provided with Sch 40S pipe ends in accordance with ASTM A312
14. Execution
15. Install per manufacturers’ installation instructions and Mechanical Contractors Association of America “Guidelines for Quality Piping Installations”.
16. Flexible hose expansion loops shall have a factory supplied, hanger / support lug.