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| Version | Date | Description of Revisions |
| 1 | August 30, 2006 | Approved final document. |
| 2 | August 12, 2014 | First draft review (AV) |
| **3** | **September 16, 2015** | **Updated, Finalized Specification – Reference eDOCS #5823667-v4 (AV)** |
| 4 | May 25, 2017 | Updated references to standards ASME B16.1-2015, ASTM A193/A193M-16, ASTM A194/A194M-17, ASTM A307-14e1, ASTM A563-15, ASTM F437-15, ASTM F441/F441M-15 (AAM) |

NOTE:

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**Notice:** This Document hardcopy must be used for reference purpose only.

**The on-line copy is the current version of the document.**

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| Item | Size | Description |
| Pipe | All | Schedule [40] [80] CPVC: Type IV, Grade I or Class 23447-B conforming to ASTM D1784-11 and ASTM F441/F441M-15. [Pipe shall be manufactured with 2 percent titanium dioxide for ultraviolet protection.]  Threaded nipples shall be Schedule 80. |
| Fittings | All | Schedule to Match Pipe Above: Conforming to the requirements of ASTM F439-13 for socket weld type and Schedule 80 ASTM F437-15 for threaded type. Fittings shall be manufactured with 2 percent titanium dioxide for ultraviolet protection. |
| Joints | All | Solvent socket weld except where connection to threaded valves and equipment may require future disassembly. |
| Flanges | All | One piece, molded hub Type CPVC flat face flange in accordance with Fittings above; 862 kPag ASME B16.1-2015 drilling. |
| Bolting | All | Flat Face Mating Flange and In Corrosive Areas: ASTM A193/A193M-16, Type 316 stainless steel Grade B8M hex head bolts and ASTM A194/A194M-17 Grade 8M hex head nuts.  Raised Face Mating Flange: Carbon steel ASTM A307-14e1 Grade B square head bolts and ASTM A563-15 Grade A heavy hex head nuts. |
| Gaskets | All | Flat Face Mating Flange: Full faced 3 mm thick ethylene propylene (EPR) rubber.  Raised Face Mating Flange: Flat ring 3 mm ethylene propylene (EPR) rubber, with filler gasket between outside diameter of raised face and flange outside diameter to protect the flange from bolting moment. |
| Solvent Cement | All | As recommended by the pipe and fitting manufacturer conforming to the requirements of ASTM F493-14 [, except solvent weld cement for CPVC pipe joints in sodium hypochlorite service shall be free of silica filler and shall be certified by the manufacturer to be suitable for that service. Certification shall be submitted to the Consultant]. |
| Thread Lubricant | All | Teflon tape. |

**END OF SECTION**