**Section 890.APPENDIX A Plumbing Materials, Equipment, Use Restrictions and Applicable Standards**

**Section 890.TABLE A Approved Materials and Standards**

All materials shall meet at least one of the approved standards listed.

**Approved Building Drainage/Vent Pipe**

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | Acrylonitrite Butadiene Styrene (ABS) Pipe | | ASTM D 2661-2011 |
|  |  | | ASTM F 628-2012 |
|  | | | CSA B181.1-2011 in B1800 |
|  | | Joints | ASTM D 2235-2011 |
|  | | | CSA B602-2010 |
|  | | Solvent Cement1 | ASTM D 2235-2011  ASTM D 3138-2011 |
|  | | | CSA B181.1-2011 in B1800 |
|  | | |  |
| 2) | Brass Pipe | | ASTM B 43-2009 |
|  |  | |  |
| 3) | Cast Iron Pipe | | ASTM A 74-2009 |
|  |  | | ASTM A 888-2011 |
|  |  | | ASTM C 564-2012 |
|  |  | | CISPI 301-2009 |
|  | | | CSA B70-2012  FM 1680-1989 |
|  | | |  |
| 4) | Chlorinated Polyvinyl Chloride (CPVC)  (Pipe and Fittings for Chemical Waste Drainage  Systems) | | ASTM F2618-2009 |
|  | | |  |
| 5) | Copper/Copper Alloy Pipe | | ASTM B 42-2010 |
|  |  | | ASTM B 302-2012 |
|  |  | |  |
| 6) | Copper/Copper Alloy Tubing | | ASTM B 75/B75M-2011 |
|  | (K-L-M or DWV)2 | | ASTM B 88-2009 |
|  |  | | ASTM B 251-2010 |
|  |  | | ASTM B 306-2009 |
|  |  | |  |
| 7) | Galvanized Steel Pipe2 | | ASTM A 53/A53M-2012 |
|  |  | |  |
| 8) | Glass Fiber Borosilicate Pipe3 | | ASTM C 1053-2010 |
|  |  | |  |
| 9) | High Silicon Content Cast Iron Pipe3 | | ASTM A 377-2008e1 |
|  | | | CSA B70-2012 |
|  | | |  |
| 10) | Polypropylene Pipe3 | |  |
|  | | | CSA B137.1-2009 in B137 |
|  | | |  |
| 11) | Polyvinyl Chloride (PVC) Pipe and Fittings | | ASTM D 2665-2012 |
|  |  | | ASTM D 2949-2010 |
|  | | | CSA B137.2-2009 in B137 |
|  | | | CSA B181.2-2011 in B1800 |
|  | | |  |
| 12) | Polyvinyl Chloride (PVC) Pipe with Cellular Core4 | | ASTM F891-2010  ASTM F1760-2011 |
|  | | Joints | ASTM D 2855-2010 |
|  | | Primer | ASTM F 656-2010 |
|  | | Solvent Cement1 | ASTM D 2564-2012  ASTM D 3138-2011 |
|  | |  |  |
| 13) | Polyvinylidene Fluoride3 | | ASTM D 3222-2010 |
|  |  | |  |
| 14) | Solder | | ASTM B 32-2008 |
|  |  | |  |
| 15) | Stainless Steel – types 304 and 316L | | ASME A112.3.1-2007 (R2012) |
|  |  | |  |
| 16) | Stainless Steel Buttweld Fittings | | ASTM A 403/A 403M-2012  ASTM A 774/A 774M-2009 |
|  |  | |  |
| 17) | Stainless Steel Flanges | | ASTM A 2400/A 240M-2012a |
|  |  | |  |
| 18) | Identification of Piping Systems | | ASME A13.1-2007 |

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1993.

2 Type M copper tubing, DWV copper tubing, and galvanized steel pipe are approved for above-ground uses only.

3 Approved for corrosive waste or corrosive soil conditions.

4 PVC pipe with cellular core is approved only for gravity drainage and venting.

5 ASME B.1.20.1-1983

**Approved Materials for Building Sewer**

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | Acrylonitrite Butadiene Styrene (ABS) Pipe | | ASTM D 2661-2011 |
|  | |  | ASTM D 2751-2005 |
|  | |  | ASTM F 628-2012 |
|  | |  | CSA B181.1-2011 in B1800 |
|  | | Joints | ASTM D 2235-2011 |
|  | |  | CSA B602-2010 |
|  | | Solvent Cement1 | ASTM D 2235-2011  ASTM D 3138-2011 |
|  | | | CSA B181.1-2011 in B1800 |
|  | | |  |
| 2) | Asbestos Cement Pipe | | ASTM C 428/C 428M-2011e1 |
|  |  | | CSA B127.1-1999 (R2009) |
|  |  | |  |
| 3) | Cast Iron Soil Pipe/Fittings | | ASTM A 74-2009 |
|  | | | CSA B70-2012 |
|  | Hubless Soil Pipe | | CISPI 301-2009 |
|  |  | | CISPI 310-2011 |
|  | | | CSA B70-2012  FM 1680-1989 |
|  | Rubber Gaskets | | ASTM C 564-2012  ASTM D 4161-2010 |
|  |  | | CSA B70-2012 |
|  |  | | CSA B602-2010 |
|  |  | |  |
| 4) | Copper/Copper Alloy Tubing | | ASTM B 88-2009 |
|  |  | |  |
| 5) | Concrete Pipe | | ASTM C 14-2011 |
|  |  | | ASTM C 76-2013  ASTM C 443-2012 |
|  | | | CSA B602-2010 |
|  | | |  |
| 6) | High-Density Polyethylene (HDPE) Pipe | | ASTM D 3350-2012 |
|  | | |  |
| 7) | Polyvinyl Chloride (PVC) Pipe | | ASTM F 1866-2007 |
|  |  | | ASTM D 2665-2012 |
|  |  | | ASTM D 2949-2010 |
|  |  | | ASTM D 3034-2008 |
|  | | | CSA B182.1-2011 in B1800 |
|  |  | | CSA B182.2-2011 in B1800 |
|  |  | | CSA B182.4-2011 in B1800 |
|  |  | | CSA B181.2-2011 in B1800 |
|  | Joints | | ASTM D 2855-2010  ASTM D 3212-2013 |
|  | | | CSA B602-2010 |
|  | Primer | | ASTM F 656-2010 |
|  | Solvent Cement1 | | ASTM D 2564-2012  ASTM D 3138-2011 |
|  | | | CSA B181.2-2011 in B1800 |
|  | | |  |
| 8) | Polyvinyl Chloride (PVC) Pipe with Cellular Core2 | | ASTM F 891-2010 |
|  | Joints | | ASTM D 2855-2010  ASTM D 412-2006ae2 |
|  | Primer | | ASTM F 656-2010 |
|  | Solvent Cement1 | | ASTM D 2564-2012  ASTM D 3138-2011 |
|  |  | |  |
| 9) | Solder | | ASTM B 32-2008 |
|  |  | |  |
| 10) | Vitrified Clay Pipe2 | | ASTM C 4-2009 |
|  |  | | ASTM C 700-2013  ASTM C 425-2009 |
|  |  | |  |
| 11) | Polypropylene Pipe2 | | ASTM F 2389-2010  AWWA C901-2008  AWWA C906-2012  (Material Code PE3408)3  (Material Codes PE2406 and PE3406)4 |
|  |  | |  |
| 12) | Identification of Piping Systems | | ASME A13.1-2007 |

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1988.

2 PVC pipe with cellular core and vitrified clay pipe are approved only for gravity drainage.

3 Dimension Ratio (DR) 17 or less.

4 Dimension Ratio (DR) 13.5 or less.

**Approved Materials for Water Service Pipe**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1) | Acrylonitrite Butadiene Styrene (ABS) Pipe2 | | ASTM D 1527-2005 | |
|  |  | |  | |
|  | Joints | | ASTM D 2235-2011 | |
|  | Solvent Cement1 | | ASTM D 2235-2011 | |
|  |  | |  |  |
| 2) | Brass Pipe2 | | ASTM B 43-2009 | |
|  | | |  | |
| 3) | Cast Iron (ductile iron)2 | | ASTM A 377-2008e1 | |
|  | Water Pipe | | CSA B70-2012  AWWA C151-2009 | |
|  |  | |  |  |
| 4) | Chlorinated Polyvinyl Chloride (CPVC) Pipe2 | | ASTM D 2846/D 2846M-2009be1 | |
|  |  | | ASTM F 441/F 441M-2012 | |
|  |  | | ASTM F 442/F 442M-2012 | |
|  | | | CSA B137.6-2009 in B137 | |
|  | Joints | | ASTM D 2846/D 2846M-2009be1 | |
|  |  | | CSA B137.6-2009 in B137 | |
|  | Solvent Cement1 | | ASTM F 493-2010 | |
|  |  | | CSA B137.6-2009 in B137 | |
|  |  | |  |  |
| 5) | Copper/Copper Alloy Pipe2, 3 | | ASTM B 42-2010 | |
|  |  | | ASTM B 302-2012 | |
|  |  | |  |  |
| 6) | Copper/Copper Alloy Tubing2,3 | | ASTM B 88-2009 | |
|  |  | |  |  |
| 7) | Galvanized Steel Pipe2 | | ASTM A 53/A 53M-2012 | |
|  |  | |  |  |
| 8) | Poly Butylene (PB) Pipe/Tubing2 | | CSA B137.8-2009 in B137 | |
|  |  | |  |  |
| 9) | Polyethylene (PE) Pipe2 | | ASTM D 2239-2012a  AWWA C901-2008  AWWA C906-2012  (Material Code PE3408)4  (Material Codes PE2406 and PE3406)5 | |
|  | | |  | |
| 10) | Polyethylene (PE) Tubing2 | | ASTM D 2737-2012a | |
|  | | | CSA B137.1-2009 in B137 | |
|  | | |  | |
| 11) | Polypropylene Pipe2 | | ASTM F 2389-2010 | |
|  | | |  | |
| 12) | Polyvinyl Chloride (PVC) Pipe2 | | ASTM D 1785-2012 | |
|  |  | | ASTM D 2241-2009 | |
|  |  | | ASTM D 2672-2009  ASTM F 477-2010  AWWA C900-2007 | |
|  | | | CSA B137.3-2009 in B137 | |
|  | | |  | |
|  | | Joints | ASTM D 2855-2010  ASTM D 3139-2011 | |
|  | | | CSA B137.2-2009 in B137 | |
|  | | | CSA B137.3-2009 in B137 | |
|  | | |  | |
|  | | Primer | ASTM F 656-2010 | |
|  | | Solvent Cement1 | ASTM D 2564-2012 | |
|  | |  | CSA B137.3-2009 in B137 | |
|  | | |  | |
| 13) | Stainless Steel Pipe2 | | ASTM A 312/A 312M-2012a  ASTM A 403/A 403M-2012  ASTM A 511/A 511M-2012 | |
|  | | |  | |
| 142) | Welded Copper Water Tube2 | | ASME B31.1-2012  ASTM B 447-2012a WK and WL | |
|  |  | |  |  |
| 15) | Solder | | ASTM B 32-2008 | |

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1988.

2 Water service pipe must meet the appropriate NSF standard for potable water.

3 Type K or L copper may be installed underground.

4 Dimension Ratio (DR) 17 or less.

5 Dimension Ratio (DR) 13.5 or less.

6 ASME B.1.20.1-1983.

**Approved Materials for Water Distribution Pipe**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1) | | Brass Pipe2 | | | ASTM B 43-2009 |
|  | |  | | |  |
| 2) | | Chlorinated Polyvinyl Chloride2 (CPVC) Pipe/Tubing | | | ASTM D 2846/D 2846M-2009be1 |
|  | | ASTM F 441/F 441M-2012 |
|  | |  | | | ASTM F 442/F 442M-2012 |
|  | | | | | CSA B137.6-2009 in B137 |
|  | | Joints | | | ASTM D 2846/D 2846M-2009be1 |
|  | | | | | CSA B137.6-2009 in B137 |
|  | | Solvent Cement1 | | | ASTM F 493-2010 |
|  | |  | | | CSA B137.6-2009 in B137 |
|  | |  | | |  |
| 3) | | Copper/Copper Alloy Pipe2 | | | ASTM B 42-2010 |
|  | |  | | | ASTM B 302-2012  AWWA C606-2011 |
|  | |  | | |  |
| 4) | | Copper/Copper Alloy Tubing2 | | | ASTM B 88-2009 |
|  | |  | | |  |
| 5) | | Cross Linked Polyethylene2 | | | ASTM F 876-2013a |
|  | | Distribution Systems  Joints | | | ASTM F 877-2011a  ASTM F 1807-2012  ASTM F 1960-2012  ASTM F 2080-2012  ASTM F 2098-2008  ASTM F 2159-2011  ASSE 1061-2011 |
|  | | | | | CSA B137.5-2009 in B137 |
|  | | | | |  |
| 6) | | Galvanized Steel Pipe2 | | | ASTM A 53-2012  AWWA C606-2011 |
|  | |  | | |  |
| 7) | | Poly Butylene (PB) Pipe/Tubing2 | | |  |
|  | | | | |  |
|  | | | | | CSA B137.8-2009 in B137 |
|  | | | | |  |
| 8) | | | Polypropylene Pipe2 | | ASTM F 2389-2010 |
|  | | | | |  |
| 9) | | Polyvinyl Chloride (PVC) Pipe2, 3 | | | ANSI/NEMA Z535.1-2006 (R2011)  ASTM D 1785-2012 |
|  | | | |  | ASTM D 2241-2009 |
|  | | | |  | ASTM D 2672-2009 |
|  | | | |  | CSA B137.3-2009 in B137 |
|  | | | | Joints | ASTM D 2855-2010  ASTM F 441/F 441M-2012 |
|  | | | |  | CSA B137.2-2009 in B137 |
|  | | | |  | CSA B137.3-2009 in B137 |
|  | | | | Primer | ASTM F 656-2010 |
|  | | | | Solvent Cement1 | ASTM D 2564-2012 |
|  | | | |  | CSA B137.3-2009 in B137 |
|  | | | |  |  |
| 10) | Stainless Steel Pipe2 | | | | ASTM A 312/A 312M-2012  ASTM A 403/A 403M-2012  ASTM A 511/A 511M-2012 |
|  | | | |  |  |
| 11) | | Welded Copper Water Tube2 | | | ASTM B 447-2012a WK, WL and WM |
|  | |  | | |  |
| 12) | | Solder | | | ASTM B 32-2008 |

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1988.

2 Water distribution pipe must meet the appropriate NSF standard for potable water. Plastic shall be rated at 160 psi at 73.4 degrees Fahrenheit.

3 Use forcold or tempered water only.

4 ASME B.1.20.1-1983.

5 Safety Color.

**Approved Materials and Standards for**

**Plumbing Fixtures and Fixture Fittings**

|  |  |  |
| --- | --- | --- |
| 1) | Bathtub Liners (plexiglass/ABS or acrylic/plastic) | IAPMO/ANSI Z124.8-2013 |
|  |  |  |
| 2) | Bathtubs, Plastic |  |
|  |  |  |
|  |  | CSA B45.5-2011/IAPMO Z124-2011 |
|  |  |  |
| 3) | Bidets | ASME A112.19.2-2013/CSA B45.1-2013 |
|  | |  |
| 4) | Enameled Cast Iron and Enameled Steel Plumbing Fixtures | ASME A112.19.1-2008/CSA B45.2-2008 |
|  | |  |
| 5) | Fittings: |  |
|  | Plumbing Fixture Fittings (metering valves, faucets,  etc.) | ASME A112.18.1-2012/CSA B125.1-2012 |
|  |  |
|  | Suction Fittings for Use in Swimming Pools, Wading  Pools, Spas, Hot Tubs and Whirlpool Bathtub  Appliances | ANSI/APSP 16-2011  CSA C22.2 No. 218.1-M1989 (R2011)  CSA C22.2 No. 218.2-1993 (R2008) |
|  |  |  |
| 6) | Floor Drains and Trench Drains | ASME A112.6.3-2001 (R2007) |
|  | | CSA B79-2008 |
|  | |  |
| 7) | Flushometer Bowls | ASME A112.19.2-2013/CSA B45.1-2013 |
|  | | CSA B125.3-2011 |
|  | Flushometers | ASSE 1037-1990 |
|  | | CSA B125.3-2011 |
|  | |  |
| 8) | Grease Interceptors | ASME A112.14.3-2000 (R2004) |
|  |  |  |
| 9) | Low Consumption (1.6 gpf) Water Closets1 | ASME A112.19.2-2013/CSA B45.1-2013  ASME A112.19.14-2006 (R2-11) |
|  |  |  |
| 10) | Plastic Lavatory |  |
|  | | CSA B45.5-2011/IAPMO Z124-2011 |
|  | |  |
| 11) | Plastic Shower Receptors/Shower Stalls |  |
|  | | CSA B45.5-2011/IAPMO Z124-2011 |
|  | |  |
| 12) | Plastic Water Closets Bowls/Tanks |  |
|  | | CSA B45.5-2011/IAPMO Z124-2011 |
|  | |  |
| 13) | Plastic Urinals Fixtures | CSA B45.5-2011/IAPMO Z124-2011 |
|  | |  |
| 14) | Porcelain Enameled Formed Steel Plumbing  Fixtures, including Bathtub Liners | ASME A112.19.1-2008/CSA 45.2-2008 |
|  | |  |
| 15) | Stainless Steel Plumbing Fixtures (Residential) | ASME A112.19.3-2008/CSA B45.4-2008 |
|  | |  |
| 16) | Vitreous China Plumbing Fixtures | ASME A112.19.2-2013/CSA B45.1-2013 |
|  | |  |
| 17) | Vitreous China Nonwater Urinals | ASME A112.19.19-2006 (R2011) |
|  | |  |
| 18) | Whirlpool Bathtub Appliances | ASME A112.19.7-2012/CSA B45.10-2012 |
|  |  |  |
|  |  | CSA C22.2 No. 218.2-1993 (R2008) |

Agency Note:

The water pressure at each fixture installation shall meet the manufacturer's minimum recommended level for the fixture.

**Approved Standards for Plumbing**

**Appliances/Appurtenances/Devices**

|  |  |  |
| --- | --- | --- |
| 1) | Anti-Backflow Freezeless Wall Hydrants | ASSE 1019-2011 |
|  | | ASME A112.18.1-2012/CSA B125.1-2012 |
|  | |  |
| 2) | Anti-Scald Control Valve | ASSE 1016-2011/ASME A112.1016-2011/CSA B125.16-2011 |
|  | |  |
| 3) | Anti-siphon Self-Drain Frost Proof Sillcock | ASSE 1019-2011  CSA B125.3-2012 |
|  | |  |
| 4) | Automatic Ice Making Equipment | NSF/ANSI 12-2009 |
|  | | CSA C22.2 No. 120-M1991 (R2008) |
|  | |  |
| 5) | Automatic Storage Type Water Heater Less Than  75,000 BTU/HR | ANSI Z21.10.1-2009/CSA 4.1-2009  ASHRAE 90.1 2010  ASHRAE 90.2-2007  ANSI Z21.10.1a-2009/CSA 4.1a-2009 |
| ANSI Z21.10.1b-2011/CSA 4.1b-2011 |
|  | |  |
| 6) | Back Water Valves | ASME A112.14.1-2003 (R2012) |
|  | | CSA B181.1-2011 in B1800 |
|  | | CSA B181.2-2011 in B1800 |
|  | | CSA B182.1-2011 in B1800 |
|  | | CSA B70-2012 |
|  | |  |
| 7) | Circulating Tank, Instantaneous | ANSI Z21.10.1-2009/CSA 4.1-2009  ANSI Z21.10.1a-2009/CSA 4.1a-2009  ANSI Z21.10.1b-2011/CSA 4.1b-2011 |
|  | | ANSI Z21.10.3-2011/CSA 4.3-2011 |
|  | | ANSI Z21.13-2010/CSA 4.9-2010  ANSI Z21.13a-2010/CSA 4.9a-2010  ANSI Z21.13b-2012/CSA 4.9b-2012 |
|  | | CSA B140.12-2003 (R2008) |
|  | | CSA C22.2 No. 110-1994 (R2009)  UL 499-2005 |
|  | |  |
| 8) | Circulating Tank, Instantaneous, Automatic | ANSI Z21.10.3-2011/CSA 4.3-2011  ANSI Z21.13-2010/CSA 4.9-2010  ANSI Z21.13a-2010/CSA 4.9a-2010  ANSI Z21.13b-2012/CSA 4.9b-2012  UL 174-2004 |
|  | | CSA 4.1-2011 |
|  |  | CSA B140.12-2003 (R2008) |
|  |  | CSA C22.2 No. 110-1994 (R2009) |
|  |  |  |
| 9) | Detergent/Chemical Feeders for Commercial Use | ASSE 1055-2009 |
|  |  | CSA C22.2 No. 0-2010 |
|  |  | CSA C22.2 No. 0.4-2004 (R2009) |
|  | | CSA C22.2 No. 68-1992 (R2008) |
|  | | CSA C22.2 No. 142-M1987 (R2009) |
|  | |  |
| 10) | Dishwashing Machine (Commercial) | ASSE 1004-2008  ANSI Z83.21-2005/CSA C22.2 No. 168-2005  ANSI Z83.21a-2012/CSA C22.2 No. 168a-2012 |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 0.4-2004 (R2009) |
|  | |  |
| 11) | Dishwashing Machine (Residential) | ASSE 1006-1986 (R1989) |
|  |  | CSA C22.2 No. 167-2008 |
|  |  |  |
| 12) | Diverters for Residential – Anti-Siphon |  |
|  | | ASME 1112.18.1-2012/CSA B125.1-2012 |
|  | |  |
| 13) | Double Check Detector Assembly | ASSE 1048-2011 |
|  | | CSA B64-2011 |
|  | |  |
| 14) | Double Check With Atmospheric Vent | ASSE 1012-2009 |
|  | | CSA B64-2011 |
|  | |  |
| 15) | Double Check Valve Assembly | ASSE 1015-2011 |
|  | | CSA B64-2011 |
|  | |  |
| 16) | Drinking Fountains | ASHRAE 18-2008 (R2013)  UL 399-2008  ASME A112.19.2-2013/CSA 45.1-13 |
|  | |  |
| 17) | Drinking Water Treatment Units – Health Effects | NSF/ANSI 53-2011a |
|  |  |  |
| 18) | Drinking Water Treatment Units – Aesthetic  Effects | NSF/ANSI 42-2011 |
|  |  |  |
| 19) | Drinking Water Treatment Chemicals | NSF/ANSI 60-2012 |
|  |  |  |
| 20) | Dual Check Valve | ASSE 1024-2004 |
|  | | CSA B64-2011 |
|  | |  |
| 21) | Duel Check Valve (Carbonated Beverage) (Relief  Port Required) | ASSE 1022-2003  CSA B64-2011 |
|  | |  |
| 22) | Food Waste Disposal (Commercial) | ASSE 1009-1990 |
|  | | CSA C22.2 No. 1-2010 |
|  | | CSA C22.2 No. 68-1992 |
|  | |  |
| 23) | Food Waste Disposal (Residential) | ASSE 1008-2006 |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 68-2008 |
|  | |  |
| 24) | Gas Water Heater Above 75,000 BTU | ANSI Z21.10.3-2011/CSA 4.3-2011 |
|  | |  |
| 25) | Gas Water Heater 75,000 BTU or Less | ANSI Z21.10.1-2009/CSA 4.1-2009  ANSI Z21.10.1a-2009/CSA 4.1a-2009 |
|  | | ANSI Z21.10.1b-2011/CSA 4.1b-2011 |
|  | |  |
| 26) | Gas Water Heater (Continuous Use) | ANSI Z21.10.1-2009/CSA 4.1-2009  ANSI Z21.10.1a-2009/CSA 4.1a-2009 |
|  | | ANSI Z21.10.1b-2011/CSA 4.1b-2011 |
|  | |  |
| 27) | Gas Water Heater – Space Heating | ANSI Z21.10.1-2009/CSA 4.1-2009  ANSI Z21.10.1a-2009/CSA 4.1a-2009 |
|  | | ANSI Z21.10.1b-2011/CSA 4.1b-2011 |
|  | |  |
| 28) | Grease Interceptors | PDI-G 101-2010  ASME A112.14.3-2000 (R2004) |
|  |  |  |
| 29) | Handheld Showers | ASSE 1014-2005  ASSE 1016-2011/ASME A112.1016-2011/CSA B125.16-2011 |
|  | |  |
| 30) | Home Laundry Equipment | ASSE 1007-1986 (R1992) |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 0.4-2004 (R2009) |
|  |  |  |
|  | | CSA C22.2 No. 169-1997 (R2012) |
|  | |  |
| 31) | Hot Water Dispensers-Electrical | ASSE 1023-1979 |
|  | | CSA C22.2 No. 64-2010 |
|  | |  |
| 32) | Hot Water Generating/Heat Recovery Equipment | NSF/ANSI 5-2012 |
|  |  |  |
| 33) | Ice Makers | UL 563-2009 |
|  | | CSA B45-2008 |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 0.4-2004 (R2009) |
|  | | CSA C22.2 No. 63-1993 (R2008) |
|  | | CSA C22.2 No. 120-M1991 (R2008) |
|  | |  |
| 34) | Individual Pressure Balancing  In-line valves for individuals fixture fittings | ASSE 1066-1997 |
|  |  |
|  |  |  |
| 35) | Mixing Valves  Automatic Compensating Valves for Individual Shower and Tub/Shower Combinations | ASSE 1016-2011/ASME  A112.1016-2011/CSA B125.16-2011 |
|  |  |  |
|  | Temperature Actuated Mixing Valves for Hot  Water Distribution | ASSE 1017-2009 |
|  |  |  |
|  | Automatic Temperature Control Mixing Valves | ASSE 1069-2005 |
|  |  |  |
|  | Water Temperature Limiting Devices | ASSE 1070-2004 |
|  |  |  |
|  | Mixing Valves for Plumbed Emergency  Equipment | ASSE 1071-2012 |
|  |  |  |
| 36) | Oil Fired Water Heaters | UL 732-2010 |
|  | | CSA B140.0-2003 (R2008) |
|  | | CSA B140.12-2003 (R2008) |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 3-M1988 (R2009) |
|  | |  |
| 37) | Pressure Relief Valve | ANSI Z21.22-1999 (R2008)/CSA 4.4-M1999 (R2008) |
|  | |  |
|  | | ANSI Z21.22a-2000 (R2008)/CSA 4.4a-2000 (R2008) |
|  | | ANSI Z21.22b-2001 (R2008)/CSA 4.4b-2001 (R2008) |
|  | |  |
| 38) | Pressurized Flushing Device | ASSE 1037-1990 |
|  | |  |
| 39) | Reduced Pressure Detector Assembly | ASSE 1047-2011 |
|  | | CSA B64-2011 |
|  | |  |
| 40) | Reduced Pressure Principle Backflow Preventer | ASSE 1013-2011 |
|  | | CSA B64-2011 |
|  | |  |
| 41) | Refuse Compactors/Compactor System | NSF/ANSI 13-2012 |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 68-2008 |
|  | |  |
| 42) | Relief Valves For Hot Water System | ANSI Z21.22-1999 (R2008)/CSA 4.1-M1999 (R2008) |
|  | |  |
|  | | ANSI Z21.22a-2000 (R2008)/CSA 4.4a-2000 (R2008) |
|  | | ANSI Z21.22b-2001 (R2008)/CSA 4.4b-2001 (R2008) |
|  | |  |
| 43) | Reverse Osmosis Drinking Water Treatment System | NSF/ANSI 58-2012 |
|  |  |  |
| 44) | Spray Type Dishwashing Machine for Commercial Use | NSF/ANSI 3-2012 CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 0.4-2004 (R2009) |
|  | |  |
|  | | ANSI Z83.21-2005/CSA C22.2 No. 168-2005  ANSI Z83.21a-2012/CSA C22.2 No. 168a-2012 |
|  | |  |
| 45) | Trap Seal Primer Valve | ASSE 1018-2001 |
|  | | CSA B125.3-2012 |
|  | |  |
| 46) | Vacuum Breakers, Anti-siphon | ASSE 1001-2008 |
|  | | CSA B64-2011 |
|  | |  |
| 47) | Vacuum Breakers Hose Connection | ASSE 1011-2004 |
|  | | CSA B64-2011 |
|  | |  |
| 48) | Vacuum Breaker (Laboratory Faucet) | ASSE 1035-2008 |
|  | | CSA B64-2011 |
|  | |  |
| 49) | Vacuum Breakers Pressure Type | ASSE 1020-2004 |
|  | | CSA B64-2011 |
|  | |  |
| 50) | Vacuum Relief Valve | ANSI Z21.22b-2001 (R2008) |
|  | | CSA B64-2011 |
|  | |  |
| 51) | Vending Machine for Food/Beverage | NSF/ANSI 25-2012 |
|  | | CSA C22.2 No. 0-2010 |
|  | | CSA C22.2 No. 120-M1991 (R2008) |
|  | | CSA C22.2 No. 128-1995 (R2009)  ASSE 1002-2008 |
|  | |  |
| 52) | Water Closet Personal Hygiene Devices | ASME A112.4.2-2009 |
|  | |  |
| 53) | Water Closet Tank Ballcock | ASSE 1002-2008  CSA B64-2011 |
|  | | CSA B125.3-2012 |
|  | |  |
| 54) | Water Hammer Arresters | ASSE 1010-2004 |
|  | |  |
| 55) | Water Heater Drain Valve | ASME A121.18.1-2011/CSA B125.1-2011 |
|  | |  |
| 56) | Water Pressure Reducing Valves (Domestic) | ASSE 1003-2009 |
|  | | CSA B356-2010 |
|  | |  |
| 57) | Water Softener and Treatment Devices | NSF/ANSI 44-2012 |

**Approved Standards for Fittings**

|  |  |  |
| --- | --- | --- |
| 1) | Cast Iron Threaded Drainage Fittings | ASME B16.12-2009 |
|  |  |  |
| 2) | Cast Copper Alloy Solder Pressure Fittings | ASME B16.18-2012 |
|  |  |  |
| 3) | Cast Copper Alloy Solder Drainage Fitting (DWV) | ASME B16.23-2011 |
|  |  |  |
| 4) | Copper Fittings | ASME B16.15-2011 |
|  |  | ASME B16.51-2011 |
|  |  | ASME B16.18-2012 |
|  |  | ASME B16.22-2012 |
|  |  | ASME B16.23-2011 |
|  |  | ASME B16.26-2011 |
|  |  | ASME B16.29-2012 |
|  |  | NSF/ANSI 61-2012 |
| 5) | Forged Steel Fittings, Socket, Welded, Threaded | ASME B16.11-2011 |
|  |  |  |
| 6) | Gray Iron/Ductile Iron | AWWA C 110-2009 |
|  |  | AWWA C 151-2009 |
|  |  |  |
| 7) | Malleable Iron | ASME B 16.3-2011 |
|  |  |  |
| 8) | Plastic | ASTM D 2466-2006 |
|  |  | ASTM D 2467-2006 |
|  |  | ASTM D 2564-2012 |
|  |  | ASTM F409-2012 |
|  |  | ASTM F438-2009 |
|  |  | ASTM F439-2012 |
|  | | CSA B137.3-2009 in B137 |
|  | | CSA B181.2-2011 in B1800 |
|  | | CSA B182.1-2011 in B1800 |
|  | |  |
|  | | CSA B137.6-2009 in B137 |
|  | | CSA B137.6-1999 in B137 |
|  | |  |
| 9) | Plumbing Fixture Fittings (Metering valves, faucets, etc.) | ASME A112.18.1-2012/CSA B125.1-2012 |
|  |  |  |
| 10) | Steel | ASME B 16.9-2012 |
|  |  | ASME B 16.11-2011 |
|  |  |  |
| 11) | Wrought Copper/Bronze Solder Pressure Fitting | ASME B 16.22-2012 |
|  |  |  |
| 12) | Wrought Copper and Wrought Copper Alloy Solder (Drainage Fittings) | ASME B16.29-2012 |
| ASME B16.22-2012 |
|  |  |  |
| 13) | Wrought Steel Buttwelding Fittings | ASME B16.9-2012 |
|  |  |  |
| 14) | Wrought Steel Buttwelding Short Radius Ells | ASME B16.9-2012 |

(Source: Amended at 38 Ill. Reg. 9940, effective April 24, 2014)