

DEPARTMENT OF LICENSES AND INSPECTIONS <b>CODE BULLETIN OF INFORMATION</b> <b>No. 0901 R3</b>		CODE OF GENERAL ORDINANCES OF THE CITY OF PHILADELPHIA ..... TITLE 4 — BUILDING CONSTRUCTION AND OCCUPANCY CODE
SUBJECT OF BULLETIN: PHILADELPHIA PLUMBING CODE APPROVED MATERIALS		REFERENCE CODE SECTION(S): P-302.1; P-305
ISSUED BY		ISSUE DATE 1/28/09
NAME: Michael Fink	SIGNATURE:	REVISED 4/8/11, 11/14/11, 2/25/13
TITLE: UCC Building Code Official		PAGE 1 OF 5

## ISSUE

Section P-302.1 of the Philadelphia Plumbing Code states that no material, device, fixture, method of assemblage, installation, appurtenance or appliance, other than those specified or permitted by the code, shall be installed unless it has been otherwise approved by the Department and is in conformity with the conditions of such approval.

Table P-305 of the Philadelphia Plumbing Code lists the materials that were approved at the time the table was printed. However, after consideration of recommendations made by the Philadelphia Plumbing Advisory Board and/or the Philadelphia Board of Building Standards, the Commissioner of the Department of Licenses and Inspections has approved additional items and has set the conditions and limitations of that approval. Additionally, the Courts have issued orders overturning the Department's denial of material approval. Table P-305 does not include these additional items.

## PURPOSE

For the public's convenience, we have compiled in this Code Bulletin those items that have been approved by the Department or the Court since the last printing of Table P-305; any required conditions for, or limits on, the material's approved use; and the applicable standards to be met. This list states the approvals in as generic a manner as possible.

This bulletin supersedes CB-0603, in that; it incorporates the approval of PEX announced in that bulletin. CB-0603 is hereby retired.

## POLICY

This Code Bulletin will be revised and updated as needed during the Plumbing Code cycle to include additional material approvals.

All material used in plumbing systems shall bear the label of an approved testing agency.

All material shall be installed in accordance with the indicated standard(s), the conditions of its approval, the Philadelphia Plumbing Code, and the manufacturer's instructions. Where the manufacturer's instructions do not conform to the Plumbing Code, the more restrictive shall apply.

The Department of Licenses and Inspections reserves the right to rescind or amend a material’s approval if it determines that the performance of a material is unsatisfactory.

**SUPPLEMENTAL LISTINGS**

In addition to the materials listed in Table P-305 of the Philadelphia Plumbing Code, the following materials have been approved by the Department as noted.

**Additional Materials Approved for Plumbing Installations**

Date	Material	Standard
2/20 2008	Cast iron hub and spigot soil pipe and fittings, and hubless cast iron pipe and fittings	ASTM A74 and CISPI 301 See Further Conditions of Approval for this material below
9/6 2006	Cast-iron roof drain with overflow protection	Current IAPMO IGC 187 product certification
2/6 2006	Chlorinated Poly-Vinyl Chloride (CPVC), Schedule 40 piping and fittings system for corrosive waste drainage	Current IAPMO IGC 210 product certification NSF 7 Certification “Specification for a Special Engineered (SE) Product – CPVC Corrosive Waste Drainage System”
10/25 2006	Cross-linked polyethylene pipe (PEX) for use in: One and Two-Family dwellings (Use Group R-3) as defined by the <u>Philadelphia Building Code</u> , and Three-family dwellings (Use Group R-2) as defined by the <u>Philadelphia Building Code</u> provided that the building height is three stories or less. (Basements below grade are not considered to be a story.)	ASTM F-876 “Standard Specification for Crosslinked Polyethylene (PEX) Tubing” ASTM F-877 “Standard Specification for Crosslinked (PEX) Plastic Hot and Cold Water Distribution Systems” ASTM F-1807 “Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing” ASTM F-1960 “Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing”, or ASTM F-2080 “Standard Specification for Cold-Expansion Fittings with Metal Compression-Sleeves for Cross-Linked Polyethylene (PEX) Pipe”
9/26 2007	Cross-linked polyethylene / aluminum / cross-linked polyethylene (PEX-AL-PEX)	ASTM 1281 “Standard Specification for Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe” ASTM 1974 “Standard Specification for Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene Composite Pressure Pipe” ASTM 2434, “Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing”
6/14 2004	Grease interceptor (20 GPM/40 lb. or larger)	Current IAPMO 4022 product certification
6/6 2008	Grease interceptor/grease trap	ASME A112.14.3-2000 Grease Interceptors UL 1746 Standard for External Corrosion Protection Systems For Steel Underground Storage Tanks Adherence to Further Conditions of Approval for Grease interceptors below

<b>Date</b>	<b>Material</b>	<b>Standard</b>
10/28 2010	Grease interceptor/universal polyethylene (PE) box, also used as oil separator, solid interceptor, and chemical waste tank	ASME A112.14.3 Grease Interceptors
9/26 2011	Grease and oil interceptor/separator of fiberglass reinforced polyester (FRP)	Current IAPMO 4022 product certification Adherence to Further Conditions of Approval for Grease and oil interceptors/separators of FRP below
11/15 2000	Polyvinyl Chloride (PVC) firestop systems for pressure-type pass through piping, no-hub cast iron drain-waste-vent (DWV) pipe, and combustible plastic and DWV piping	ASTM E84 “Standard Test Method for Surface Burning Characteristics of Building Materials”
1/9 2003	Grooved end pipe joining method for steel pipe, stainless steel pipe and copper tubing (K, L, M and DWV)	NSF, UL and FM listing Current IAPMO 2333 product certification
2/29 2008	Grooved mechanical pipe couplings and grooved end fittings for cast iron, copper tubing (K, L, M, DWV), plastic, stainless steel, or steel pipe for potable water, storm water, and forced sanitary drain systems in above and below ground installations.	ASTM F1476 “Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications” ASTM F1548 “Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications” ASTM A395 “Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures” ASTM A536 “Standard Specification for Ductile Iron Castings” ASTM A449 “Standard Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use” ASTM A183 “Standard Specification for Carbon Steel Track Bolts and Nuts” ASTM A449 “Standard Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use”
10/20 2010	Hinged no-hub Acrylonitrile Butadiene Styrene (ABS) coupling for joining hubless cast iron soil pipe and fittings	UL listing Current IAPMO IGC 257-2009a product certification Adherence to Further Conditions of Approval for Hinged no-hub ABS coupling below
4/9 2008	PEX tubing material in faucets	ASME A112.18.1 Plumbing Fixture Fittings ASME 112.18.6 Flexible Water Connectors Adherence to Further Conditions of Approval for PEX tubing material below
10/3 2007	Polyolefin pipe and fittings (for Corrosive Waste Drainage Systems)	ASTM F1412 “Standard Specification for Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems”

Date	Material	Standard
1/12 2008	Polypropylene (PP) pipe and fittings (for Corrosive Waste Drainage Systems)	ASTM F1412 “Standard Specification for Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems” ASTM D2447 “Standard Specification for Polyethylene (PE) Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter” ASTM D4101 “Standard Specification for Polypropylene Injection and Extrusion Materials” ASTM D3311 “Standard Specification for Drain, Waste, and Vent (DWV) Plastic Fittings Patterns” ASTM B117 “Standard Practice for Operating Salt Spray (Fog) Apparatus” ASTM F1290, “Practice for Electrofusion Joining Polyolefin Pipe and Fittings”, Technique I ASTM D2657, “Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings” Technique I
3/7 2011	Polypropylene (PP) pipe (for domestic hot- and cold-water distribution and water service)	ASTM F 2389 “Standard Specification for Pressure-Rated Polypropylene (PP) Piping Systems” NSF listing Adherence to Further Conditions of Approval for Polypropylene pipe (for domestic hot- and cold- water distribution and water service) below
11/7 2007	Siphonic roof drain system	ASME A112.6.9 “Siphonic Roof Drains” Adherence to Further Conditions of Approval for Siphonic roof drains below
10/3 2007	Stainless steel clamps	ASTM A240/A240M “Standard Specification for Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications”
12/8/ 2011	Trap Primer Alternates	ASSE 1072 “Performance Requirements for Barrier Type Seal Protection Devices” LC1015 “PMG Listing Criteria for Elastomeric, Normally Closed, Floor Drain Evaporative Resistant Sealing System Common Pleas Court overturned the Department’s denial of product approval on 12/8/11
3/19 2008	Vacuum plumbing and drainage system, stainless steel	NSF, IAPMO, UPC Adherence to Further Conditions of Approval for Vacuum plumbing and drainage system, stainless steel below
2/6 2008	Waterproof membrane suitable for shower floor as a substitute for a pan as otherwise required by P-711.1	ANSI A118.10 “Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installations”

**Further Conditions of Approval**

A material approved in the above table with a requirement to adhere to further conditions of approval shall meet the indicated condition(s) below.

1. Siphonic roof drains (11/7/07):
  - a) A Plumbing Permit application that includes the installation of a siphonic roof drain(s) shall be accompanied by plans and/or specifications that depict the particular installation site(s) and are signed and sealed by a design professional licensed or registered under the laws and regulations of the Commonwealth of Pennsylvania.

- b) The installation of the siphonic roof drain(s) shall be in accordance with the above plans and/or specifications.
2. Cast iron hub and spigot soil pipe and fittings, and hubless cast iron pipe and fittings (2/20/08):  
This material is permitted for all uses of cast iron piping and fittings as permitted by code.
3. Vacuum plumbing and drainage system, stainless steel (3/19/08):
  - a) That this system be permitted in existing buildings only;
  - b) That this system be permitted only at a location(s) certified by a licensed architect or licensed engineer attesting that there is no available drainage or practical way to install a conventional plumbing system using gravity. This certification shall be kept on file along with other permit data;
  - c) That all piping material be in accordance with Section P-305, Materials for Plumbing Installations, and Section 902, Materials.
4. Grease interceptors (6/6/08):
  - a) All grease interceptors must be approved by the Philadelphia Water Department, Industrial Waste Unit.
5. PEX tubing material (4/9/08):
  - a) That all like faucets it be manufactured in conformity with the standards set forth in NSF 61. That faucet be installed in accordance with manufacturer's instructions.
6. Hinged no-hub ABS coupling (10/20/10):
  - a) The product may be used only in residential buildings, not more than three stories in height, and accommodating not more than four dwelling units in the building.
7. Polypropylene pipe (for domestic hot- and cold-water distribution and water service) (3/7/11):
  - a) The product shall be permitted for domestic hot- and cold-water service pipe in those buildings where the use of CPVC piping is authorized by Philadelphia Plumbing Code Section 809.2. This section currently limits installation to buildings that house no more than three dwelling units and alternative housing designs such as single room occupancies with a maximum 10 beds.
8. Grease and oil interceptors/separators of fiberglass reinforced polyester (9/26/11):
  - a) Piping material to the underground grease separators and oil interceptors shall comply with Section and Table P-902.2 of the Philadelphia Plumbing Code.
  - b) The product approval shall cover only the models shown in the IAMPO Certificate of Listing –
    - 1) File No. 4697 grease interceptors GMC500, GMC750, GMC1000, GMC1300, GMC2000, GMC2600
    - 2) File No. 5497 for clarifiers, designed to separate liquids and/or solids having a different specific gravity than water, OMC500, OMC750, OMC1000, OMC1300, OMC2000, OMC2600
  - c) A copy of the IAMPO Certificate of Listing shall be submitted with each application for installation of the grease or oil interceptor.