2023 FBC - Plumbing - **604.5 S**ize of **F**ixture **S**upply The minimum size of a fixture supply pipe shall be as shown in **T**able **604.5**. The fixture supply pipe shall terminate not more than **30** inches **(762** mm) from the point of connection to the fixture. **A** reduced-size flexible water connector installed between the supply pipe and the fixture shall be of an approved type. The supply pipe shall extend to the floor or wall adjacent to the fixture. The minimum size of individual distribution lines utilized in gridded or parallel water distribution systems shall be as shown in **T**able **604.5**.

MINIMUM SIZES OF FIXTURE WATER SUPPLY PIPE		
FIXTURE	MINIMUM PIPE SIZE (inch)	
Bathtubs ^a (60" x 32" and smaller)	1/2	
Bathtubs ^a (larger than 60"x32")	1⁄2	
Bidet	3/8	
Combination sink and tray	1⁄2	
Dishwasher, domestic ^a	1⁄2	
Drinking fountain	3/8	
Hose bibbs	1/2	
Kitchen sink ^a	1/2	
Laundry, 1, 2 or 3 compartments ^a	1⁄2	
Lavatory	3/8	
Shower, single head ^a	1/2	
Sinks, flushing rim	3/4	
Sinks, service	1⁄2	
Urinal, flush tank	1⁄2	
Urinal, flushometer valve	3/4	
Wall hydrant	1/2	
Water closet, flush tank	3/8	
Water closet, flushometer tank	3/8	
Water closet, flushometer valve	1	
Water closet, one piece ^a	1/2	

than the size indicated.

TABLE 605.4 WATER SERVICE PIPE		
MATERIAL	STANDARD	
ACRYLONITRILE BUTADIENE STYRENE (ABS) PLASTIC PIPE	ASTM D1527; ASTM D2282	
CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE	ASTM D2846; ASTM F441; ASTM F442; CSA B137.6	
CHLORINATED POLYVINYL CHLORIDE/ALUMINU/CHLORINATED POLYVCHLORIDE (CPVC/AL/CPVC)	ASTM F2855	
COPPER OR COPPER-ALLOY PIPE	ASTM B42; ASTM B302	
COPPER OR COPPER-ALLOY PIPE (TYPE K, WK, L, WL, M OR WM)	ASTM B75; ASTM B88; ASTM B251; ASTM B447	
CROSS-LINKED POLYETHYLENE (PEX) PLASTIC PIPE AND TUBING	ASTM F876; AWWA C904; CSA B137.5	
CROSS LINKED POLYETHYLENE/ALUMINUM/ CROSS-LINKED POLYETHYLENE (PEX-AL-PEX) PIPE	ASTM F1281; ASTM F2262; CSA B137.10	
CROSS LINK POLYETHYLENE/ALUMINUM/ HIGH-DESTINY POLYETHYLENE (PEX-AL-HDPE)	ASTM F1986	
DUCTILE IRON WATER PIPE	AWWA C151/A21.51; AWWA C115/A21.15	
GALVANIZED STEEL PIPE	ASTM A53	
POLYETHYLENE (PE) PLASTIC PIPE	ASTM D2239; ASTM D3035; AWWA C901; CSA B137.1	
POLYETHYLENE (PE) PLASTIC TUBING	ASTM D2737; AWWA C901; CSA B1371	
POLYETHYLENE/ALUMINUM/POLYETHYLENE (PE-AL -PE) PIPE	ASTM F1282; CSA B137.9	
POLYETHYLENE OR RAISED TEMPERATURE (PE-RT) PLASTIC TUBING	ASTM F2769; CSA B137.18	
POLYPROPYLENE (PP) PLASTIC PIPE OR TUBING	ASTM F2389; CSA B137.11	
POLYVINYL CHLORIDE (PVC) PLASTIC PIPE	ASTM D1785; ASTM D2241; ASTM D2672; CSA B137.3	
STAINLESS STEEL PIPE (TYPE 304/304L)	ASTM A312; ASTM A778	
STAINLESS STEEL PIPE (TYPE 316/316L)	ASTM A312; ASTM A778	

PIPE FITTINGS SHALL BE APPROVED FOR INSTALLATION WITH THE PIPING MATERIAL INSTALLED AND SHALL COMPPLY WITH THE APPLICABLE STANDARDS LISTED IN TABLE 702.4

FBC PLUMBING 2023 TABLE 702.4 PIPING FITTINGS	
MATERIAL	STANDARD
ACRYLONITRILLE BUTADIENE STYRENE (ABS) PLASTIC PIPE IN iPS DIAMETERS	ASTM D2661; ASTM F628; CS
ACRYLONITRILLE BUTADIENE STYRENE (ABS) PLASTIC PIPE IN SEWER AND DRAIN	ASTM D2751
DIAMETERS CAST IRON	ASME B16.4: ASME B16.12: AS A74: ASTM, A888: CISPI 301
COPPER OR COPPER ALLOY	ASME B16.5: ASME B16.18: ASI ASME B16.23: ASME B16.26:ASI
GLASS	ASTM C1053
GRAY IRON AND DUCTILE IRON	AWWA C 110/A21.10
POLYETHYLENE	ASTM D2683
POLYOLEFIN	ASTM F1412; CSA B181.3
POLYVINYL CHLORIDE (PVC) PLASTIC IN IPS DIAMETERS	ASTM D2665; ASTM F1866
POLYVINYL CHLORIDE (PVC) PLASTIC PIPE IN SEWER AND DRAIN DIAMETERS	ASTM D3034
POLYVINYL CHLORIDE (PVC) PLASTIC PIPE WITH A 3.25-INCH O.D.	ASTM D2949
POLYVINYIDENE FLUORIDE (PVDF) PLASTIC PIPE	ASTM F1673; CSA B16L3
STAINLESS STEEL DRAINAGE SYSTEMS, TYPE 304 AND 316L	ASME A 112.3.1
STEEL	ASME B16.9; ASME B16.11; ASME B 16.28
VITRIFIED CLAY	ASTM C700

BROWARD COUNTY AMENDED 2023 <u>TABLE P 604.4</u> MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES, FIXTURE FITTINGS AND APPLIANCES		
PLUMBING FIXTURES OR FIXTURE FITTING	MAX FLOW RATE OR QUANTITY ALLOWED	
LAVATORY, PRIVATE	1.5 gpm at 60 psi	
LAVATORY, PUBLIC (METERING)	.25 gallon per metering cycle	
LAVATORY, PUBLIC (OTHER THAN METERING)	0.5 gpm at 60 psi	
SHOWER HEAD	2.0 gpm at 80 psi	
SINK FAUCET	2.2 gpm at 60 psi	
URINAL	.5 gallon per flushing cycle	
WATER CLOSET	1.28 gallons per flushing cycle	
DISHWASHER (RESIDENTIAL)	6.5 gallons per cycle Energy Star/Water Sense Certified	
DISHWASHER (COMMERCIAL)	Less than 1.2 gallons per rack for fill and dump machines and less than 0.9 gallons per rack for low temperature machines	
DISHWASHER (UNDER THE COUNTER - COMMERCIAL)	1.0 gallons per rack for high temperature machines and 1.7 gallons per rack for low temperature machines	
WASHING MACHINE	Water factor of 8 or lower ENERGY STAR/WATER SENSE CERTIFIED	
)TE: Hand-Held Shower Spray is a shower head - IF ins	STALLED	

a) HAND-HELD SHUWER SPRAY IS A SHOWER HEAD - IF INSTALLED b) Consumption tolerance shall be determined from referenced standards. c) WATER FACTOR IN GALLONS PER CYCLE PER CUBIC FOOT FBC 604.9 THE FLOW VELOCITY OF THE WATER DISTRIBUTION SYSTEM SHALL BE CONTROLLED TO REDUCE THE POSSIBILITY OF WATER HAMMER. A WATER-HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER-HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND CONFORM TO ASSE 1010.









