



Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110
Wake Forest, NC 27587
919-569-6704/fax 919-569-6703

August 4, 2020

Wake County Staff
Harnett County Environmental Health Department
900 S 9th St
Lillington, NC

RE: Flow Reduction Certification and As-built

Mason Pointe Lot 39
171 Piney Field Rd., Fuquay Varina, Harnett County, North Carolina
Project #:2031

Dear Harnett County Staff:

Central Carolina Soil Consulting, PLLC (CCSC) employees in conjunction with Bateman Civil Survey Company, reviewed fixture receipts from Thornton's Plumbing, Inc. that were installed in the house for KB Homes. The original proposed flow reduction was for a 5-bedroom house with a 20% requested reduction in flow, reducing the flow from 600 gallons per day to 480 gallons per day. The attached flow reduction as-built has been updated to include the fixtures that were installed in the house including fixture specification sheets. The as-built overall flow reduction is 39%, due to changes in shower fixtures (see spreadsheet).

These fixtures or equivalent flow fixtures are required for the life of the home. Any change in fixtures that results in a change of the flow rates must be approved by an Engineer and Harnett County Environmental Health Services.

If you need further information or have any questions please contact Matt Burdette at (919) 422-2827 or Tom Speight at 919-577-1080 2524 Reliance Ave, Apex NC 27539

Sincerely,

Central Carolina Soil Consulting, PLLC

Matt Burdette
Environmental Specialist

Bateman Civil Survey Company
NCBELS# C-2378.

Tom Speight, P.E.
(seal)



Mason Pointe Lot 39 AS BUILT						
	Item		Gal/min. or flush	Number of Fixures	Base Flow From 1982	Percent Water Savings
Optional Bath	Tub/Shower Trim	Moen T2133EP	1.8 gal/minute	1	5.5 gal/minute	67%
	Lavatory Faucet	Moen 6410	1.5 gal/minute	1	3.0 gal/minute	50%
Master Bath	Lavatory Faucet	Moen 6410	1.5 gal/minute	2	3.0 gal/minute	50%
	Shower Trim	Moen T2132EP	1.8 gal/minute	1	5.5 gal/minute	67%
	Tub	Moen T943	Fill & Release	1	Fill & Release	0%
Kitchen	Kitchen Sink Faucet	Moen 7594	1.5 gal/minute	1	3.0 gal/minute	50%
Bath 2	Tub/Shower Trim	Moen T2133EP	1.8 gal/minute	1	5.5 gal/minute	67%
	Lavatory Faucet	Moen 6410	1.5 gal/minute	2	3.0 gal/minute	50%
Laundry	Laundry Sink Faucet	Proflo PFWSC1120 CP	1.2 gal/minute	1	3.0 gal/minute	60%
Toilets	Optional, Master, Bath 2	Gerber WS-20-918	1.28 gal /flush	3	3.5 gal/minute	63%

FIXTURES	TOILET	FAUCET	SHOWER	CLOTHES WASHER	LEAK	BATH	OTHER	DISHWASHER	TOTALS
PERCENT OF HOUSE HOLD WATER USE	24%	20%	20%	16%	12%	3%	3%	2%	100%
GALLONS PER DAY (600 BASE)	144	120	120	96	72	18	18	12	600
PERCENT OF SAVINGS FROM WATER SAVING FIXTURES	63%	51% avg	67%	0	0%	0%	0%	0%	39%
ADJUSTED FLOW (GALLONS)	53	59	40	96	72	18	18	12	368



Buy it for looks. Buy it for life.®

Specifications

*There is more than 1 version of this model.
Page down to identify the version you have.*

DESCRIPTION

- Metal construction with various finishes identified by suffix
- 1/2" IPS connections
- Includes metal pop-up waste assembly

OPERATION

- Lever style handles
- Maximum handle(s) rotation angle is 90° to full on
- Rotate hot side counterclockwise to open (clockwise to close)
- Rotate cold side clockwise to open (counterclockwise to close)


FLOW

- Water usage is limited to these maximum flow rates as indicated by the corresponding product markings
 - 1.2 gpm max (4.5L/min) at 60 psi
 - 1.5 gpm max (5.7L/min) at 60 psi

CARTRIDGE

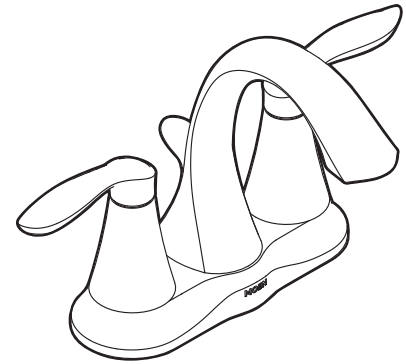
- 1234 cartridge design
- Nonmetallic and stainless steel material

STANDARDS

- Third party certified to WaterSense®, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Products marked with 1.2 gpm are compliant with California water efficiency regulations
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- **ADA**  for lever handles

WARRANTY

- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations



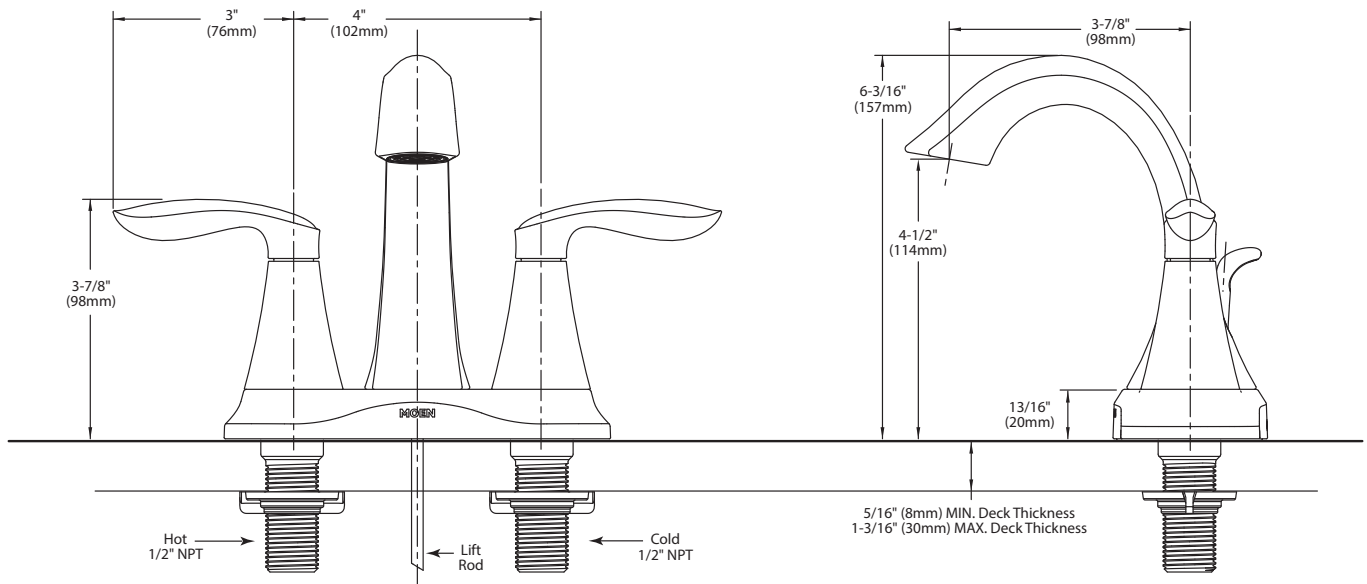
EVA™ 4" Lavatory Faucet with Metal Waste Assembly

Models: 6410 series

Bulk Models: 66410, 66411*
**(Bulk packed 6 per carton),
50/50 waste assembly**

*Includes hot (red) and cold (blue) indicators.

NOTE: THIS FAUCET IS DESIGNED TO BE
INSTALLED THRU 3 HOLES, 1" MIN. DIA.



CRITICAL DIMENSIONS

(DO NOT SCALE)



Buy it for looks. Buy it for life.®

Specifications

DESCRIPTION

- Metal construction with various finishes identified by suffix
- 1/2" IPS connections
- Includes metal pop-up waste assembly

OPERATION

- Lever style handles
- Maximum handle(s) rotation angle is 90° to full on
- Rotate hot side counterclockwise to open (clockwise to close)
- Rotate cold side clockwise to open (counterclockwise to close)


FLOW

- Flow is limited to 1.5 gpm max (5.7L/min) at 60 psi, for products made before October 2008 flow is limited to 2.2 gpm max (8.3 L/min)

CARTRIDGE

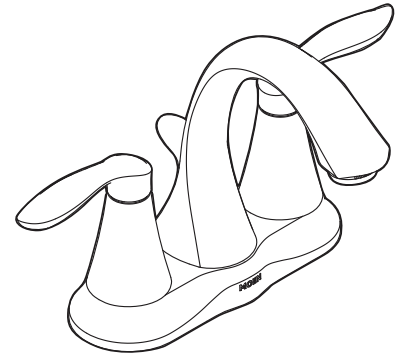
- 1224 cartridge design
- Nonmetallic and stainless steel material

STANDARDS

- Third party certified to WaterSense®, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- **ADA**  for lever handles

WARRANTY

- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations



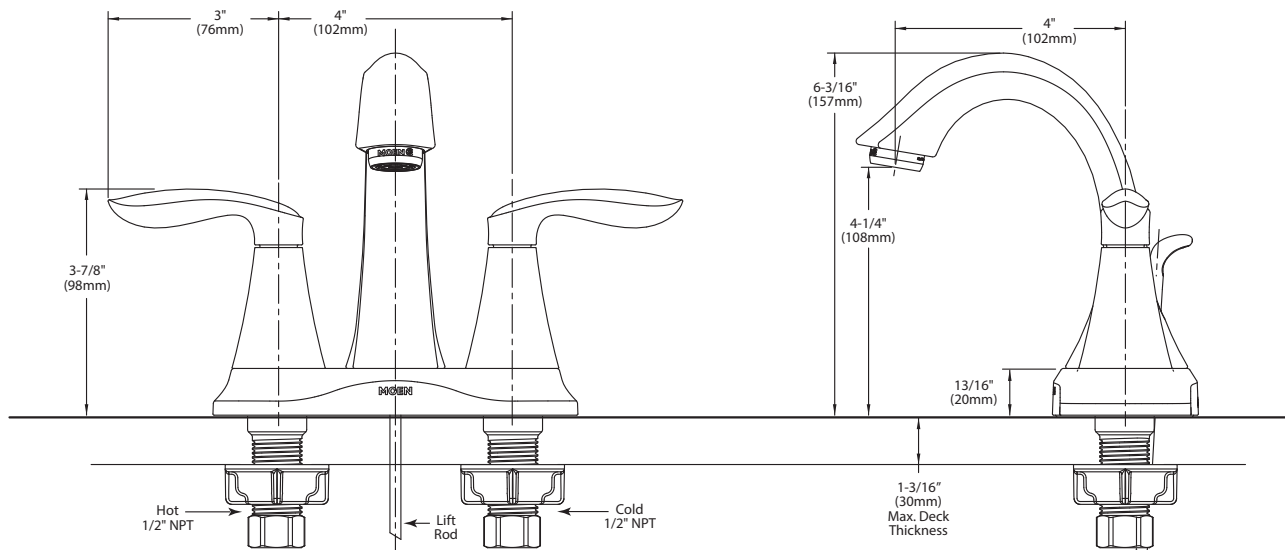
EVA™
4" Lavatory Faucet
with Metal Waste Assembly

Models: 6410 series

Bulk Models: 66410, 66411*
(Bulk packed 6 per carton),
50/50 waste assembly

*Includes hot (red) and cold (blue) indicators.

NOTE: THIS FAUCET IS DESIGNED TO BE
 INSTALLED THRU 3 HOLES, 1" MIN. DIA.



CRITICAL DIMENSIONS

(DO NOT SCALE)



Buy it for looks. Buy it for life.®

Specifications

DESCRIPTION

- Metal construction with various finishes identified by suffix
- Includes showerhead, arm, flange and diverter spout

OPERATION

- Handle operates counterclockwise through a 270° arc with off at 6 o'clock and maximum hot at the 9 o'clock position. Shut off in clockwise direction
- Adjustable temperature limit stop to control maximum hot water temperature
- Pressure balancing mechanism maintains selected discharge temperature to ± 3°

FLOW

- Showerhead is limited to 2.5 gpm (9.5 L/min) at 80 psi
- EP suffix models are limited to 1.75 gpm (6.6 L/min) at 80 psi
- NH suffix models contain no showerhead

CARTRIDGE

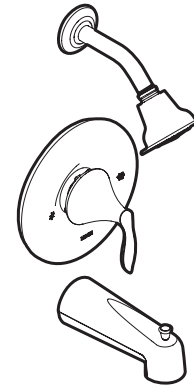
- 1222 cartridge design
- Nonmetallic/nonferrous and stainless steel materials
- Accommodates back to back installations

STANDARDS

- Third party certified to meet ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- EP suffix models are third party certified to WaterSense®
- **ADA** for lever handle

WARRANTY

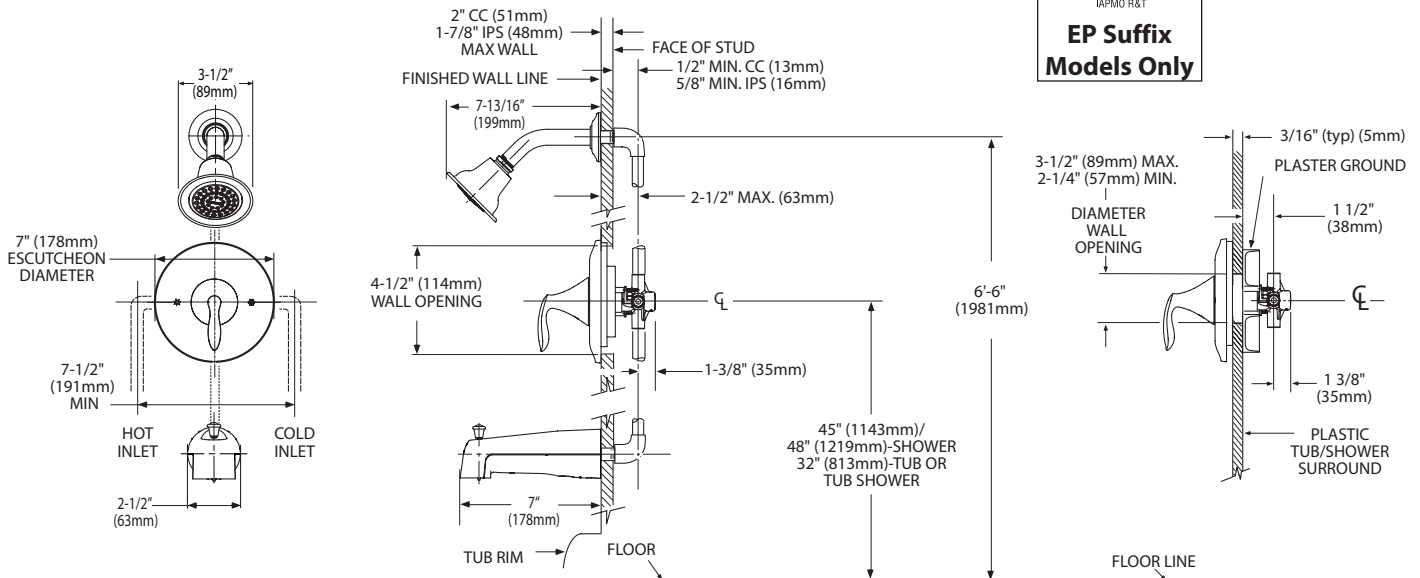
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations



EVA™ POSI-TEMP® Single-Handle Tub/Shower Trim Kit

- Models:** T2131 series - valve trim only
 T62131 (Bulk Packed 12 per carton)
 T2132 series - shower trim only
 T62132 (Bulk Packed 12 per carton)
 T2133 series - tub/shower trim
 T62133 (Bulk Packed 12 per carton)

- Valves:** 62300 series
 2500 series



CRITICAL DIMENSIONS

(DO NOT SCALE)

*There is more than one version of this model.
Page down to identify the version you have.*

FAUCET DESCRIPTION

- Reflex™ pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Duralock™ quick connect system
- Pullout spray with 68" braided hose
- Flexible supply lines with 3/8" compression fittings
- High arc spout provides height and reach to fill or clean large pots while pull out wand provides the maneuverability for cleaning or rinsing
- 360° rotating spout
- Power Boost™ Spray Technology

OPERATION

- Lever style handle
- Temperature controlled by 100° arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position


FLOW

- Flow is limited to 1.5 gpm (5.7 L/min) at 60 psi

CARTRIDGE

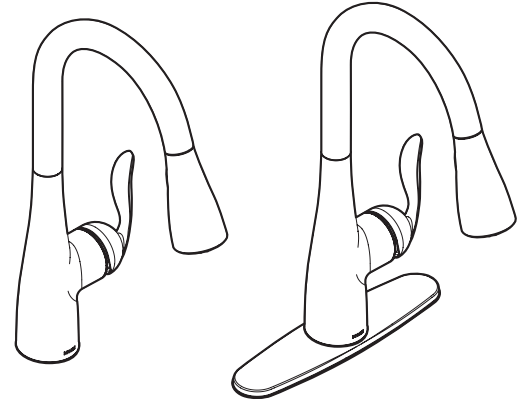
- 1255™ Duralast™ cartridge for Single-Handle Faucets

STANDARDS

- Third party certified to IAPMO Green, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- ADA  for lever handle

WARRANTY

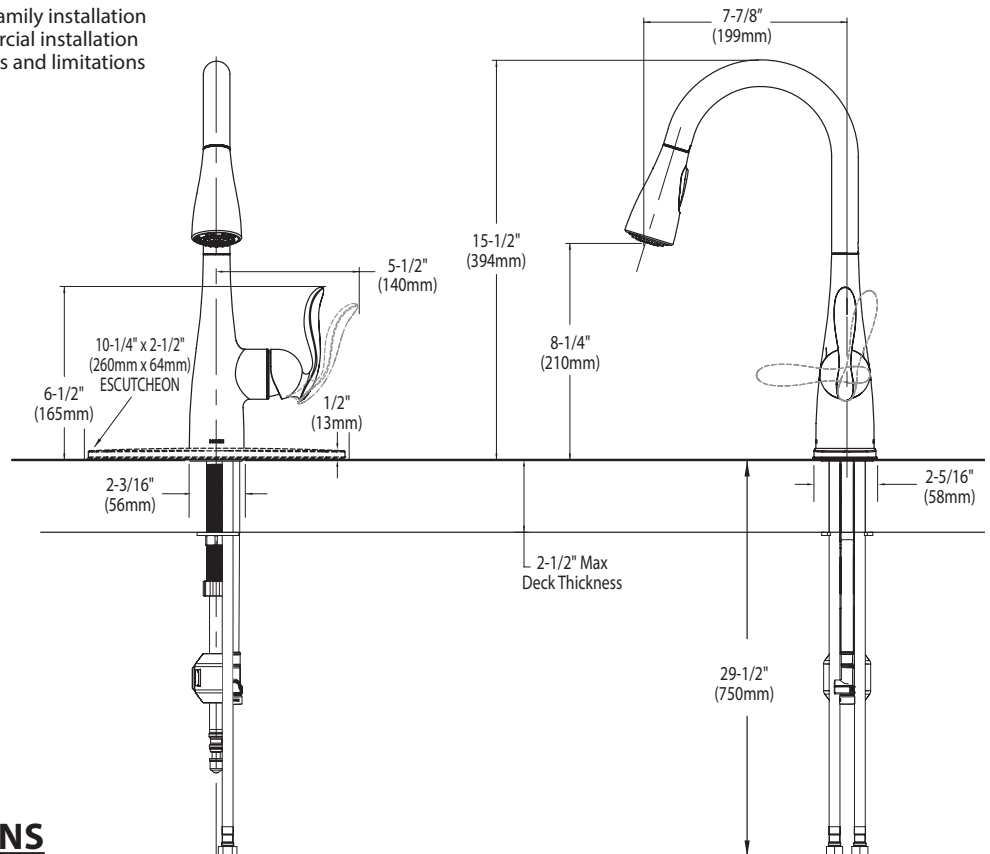
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations



ARBOR™
**Single Handle High Arc
Pulldown Kitchen Faucet**

Models: 7594 series

NOTE: THIS FAUCET IS DESIGNED TO BE INSTALLED THROUGH 1 OR 3 HOLES, 1-1/2" (38mm) MIN. DIA.



CRITICAL DIMENSIONS

(DO NOT SCALE)

TO ORDER PARTS CALL: 1-800-BUY-MOEN

www.moen.com

FAUCET DESCRIPTION

- Reflex™ pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Quick connect system
- Pullout spray with 68" braided hose
- Flexible supply lines with 3/8" compression fittings
- High arc spout provides height and reach to fill or clean large pots while pull out wand provides the maneuverability for cleaning or rinsing
- 360° rotating spout
- Power clean spray

OPERATION

- Lever style handle
- Temperature controlled by 100° arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position
- When filling a vessel outside the sink, the pause feature conveniently stops the flow of water as the wand passes over the counter top


FLOW

- Flow is limited to 1.5 gpm (5.7 L/min) at 60 psi

CARTRIDGE

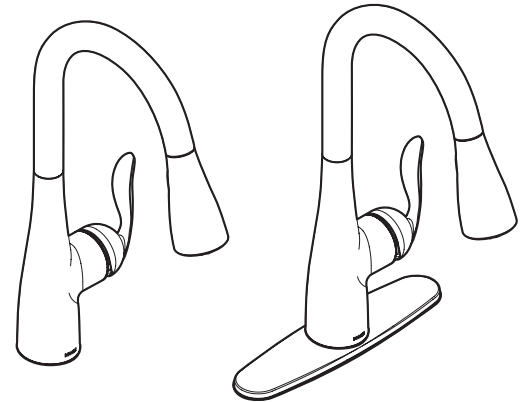
- 1255™ Duralast™ cartridge for Single-Handle Faucets

STANDARDS

- Third party certified to IAPMO Green, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- **ADA**  for lever handle

WARRANTY

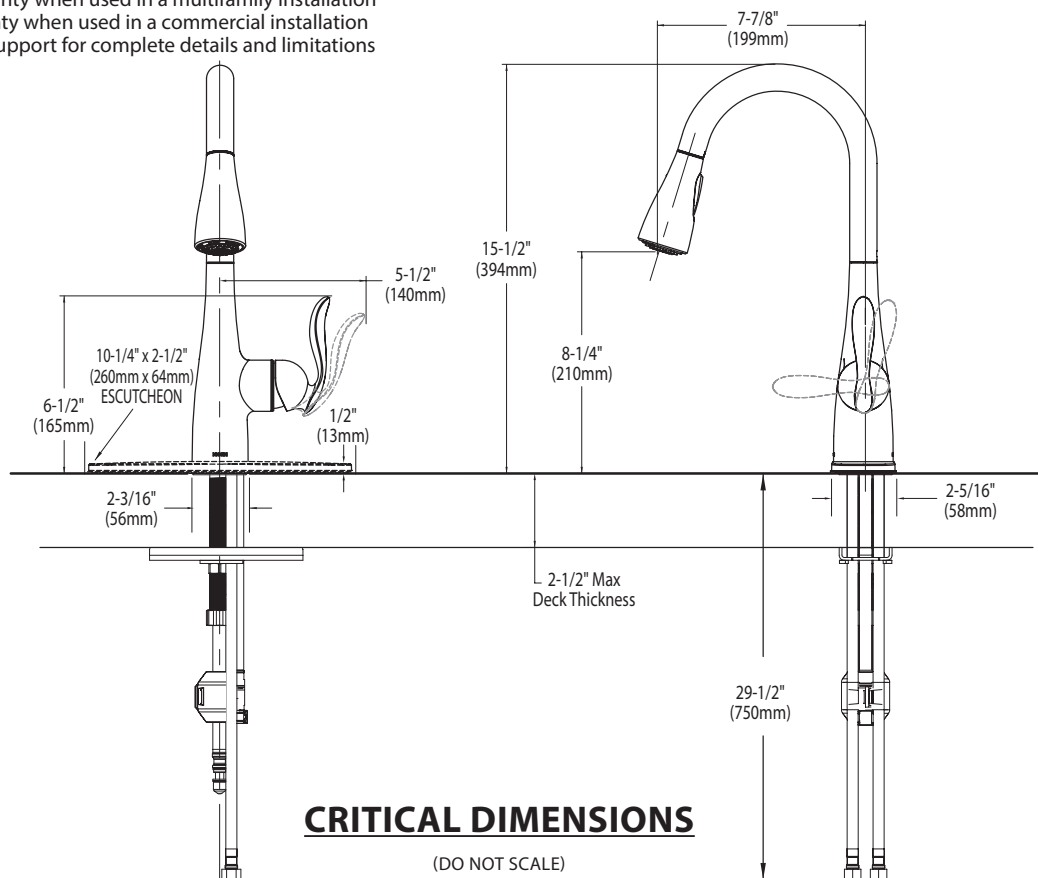
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations



ARBOR™
Single Handle High Arc
Pulldown Kitchen Faucet

Models: 7594 series

NOTE: THIS FAUCET IS DESIGNED TO BE INSTALLED THROUGH 1 OR 3 HOLES, 1-1/2" (38mm) MIN. DIA.



TO ORDER PARTS CALL: 1-800-BUY-MOEN

www.moen.com

PFWSC1120 Series

Two Handle Laundry Faucet



Product Features

- Ceramic Cartridges
- Metal Lever Handles
- Flow Rate (with hose thread adapter): Min. 4.0 GPM
- Flow Rate (with optional aerator): Max. 1.2 GPM
- Meets ANSI: A112.18.1M
- ADA Compliant

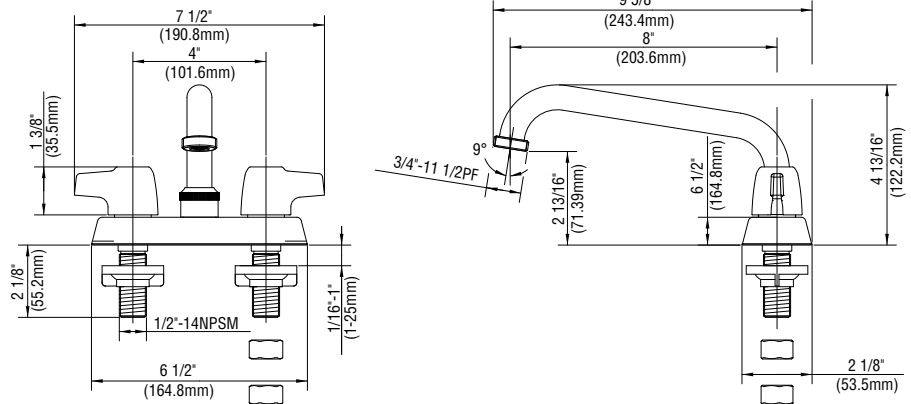
Model Numbers

PFWSC1120CP Polished chrome



PFWSC1120CP

Product Specifications



Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO faucet carries a limited lifetime warranty when installed in residential applications.

The warranty is five years in commercial applications.

This product meets ANSI: A112.18.1M.

Compliant with lead content requirements of California AB 1953.



* All measurements are nominal. Please verify before actual installation.

Distributed Exclusively by Ferguson and Wolseley Canada



MAXWELL® 1.28 ErgoHeight™, Elongated Toilet

12" Rough-in

Features:

- 1.28 gpf/4.8 Lpf high efficiency two-piece toilet
- Elongated ErgoHeight™ bowl
- Dual-fed siphon jet
- Pilot fill valve
- 3" flush valve
- 2" glazed trapway
- Color matched front tank lever
- Optional insulated non-sweating tank (28-992)
- Optional right-handed trip lever (28-990-97)
- Available in White, Bone and Biscuit
- 2 bolt caps
- ADA Compliant
- Seat not included

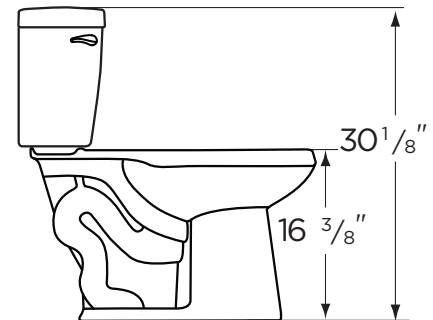
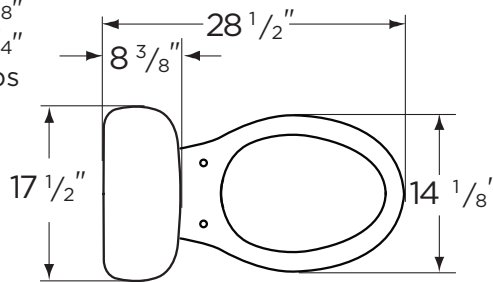
Dimensions:

- Height 30 1/8"
- Width 17 1/2"
- Depth 28 1/2"
- Rough-in 12"
- Water Surface from Rim 6 1/2"
- Trapway 2"
- Water Surface 8 7/8" x 7 3/8"
- Water Seal 2 1/4"
- Shipping Weight 85.5 lbs



Specifications: Bowl—#MX-21-928 Front Bowl

Tank—#28-990



THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.28 gpf (4.8 Lpf) OR LESS.



www.gerberonline.com

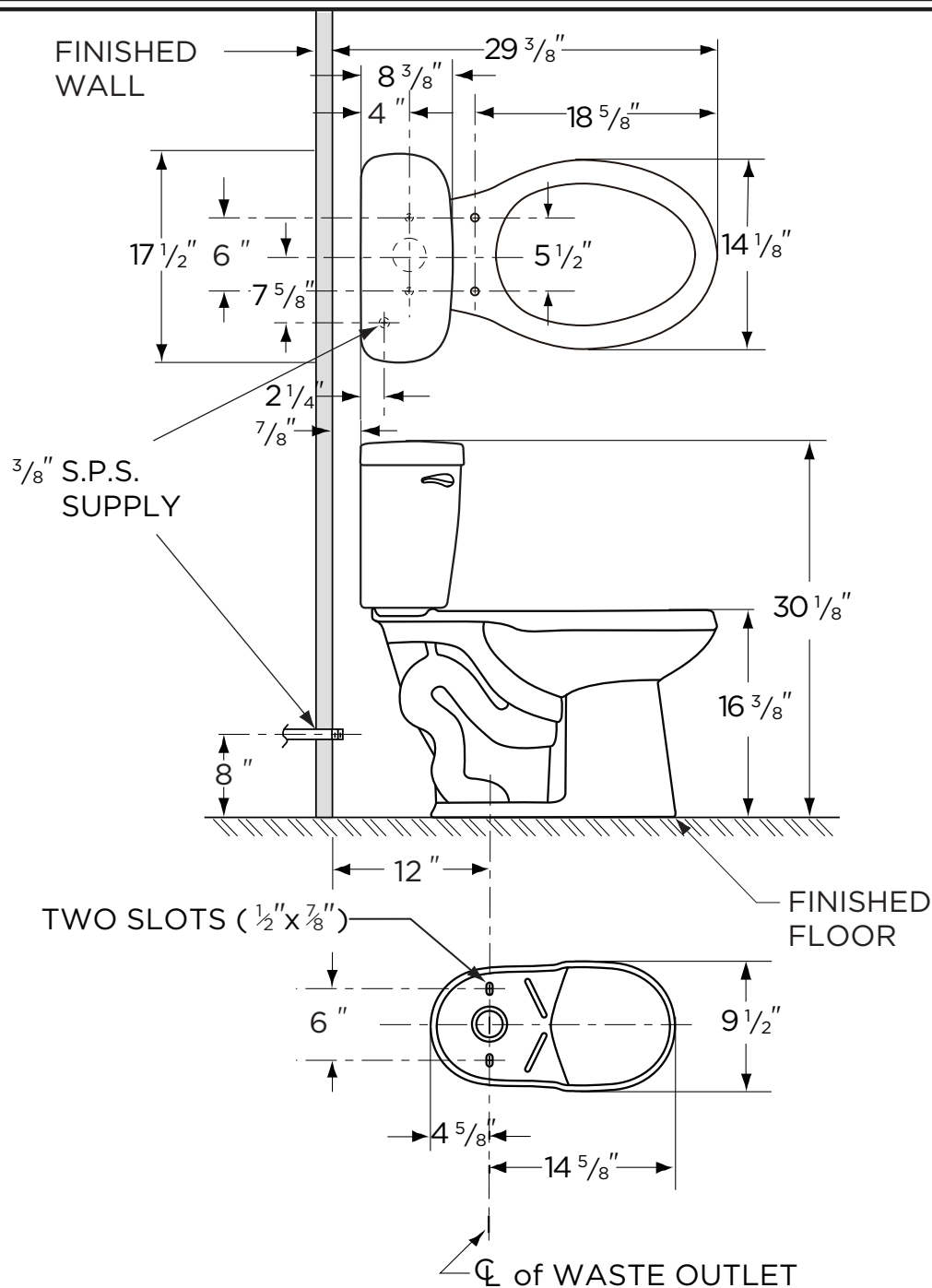
Job Name	
Date	
Model Specified	
Quantity	
Customer	
Contractor	
Architect/engineer	

GERBER®

1.28 gpf (4.8 Lpf) MAXWELL® 1.28 TOILET

WS-20-918

17" High Elongated, 12" Rough-in
(Bowl MX-21-928 with Tank 28-990)



NOTES:

All dimensions are in inches.

Illustrations may not be drawn to scale.

IMPORTANT:

Dimensions of fixtures are nominal and may vary within the range of tolerances established by ASME Standard A 112.19.2.

THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.28 gpf (4.8 Lpf) OR LESS.