



Central Carolina Soil Consulting, PLLC
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Wake Forest, NC 27587
919-569-6704/fax 919-569-6703

October 07, 2019

Andrew Currin
Harnett County Environmental Health Department
307 W Cornelius Harnett Blvd
Lillington, NC 27546

RE: Wastewater Daily Flow Calculation Certification

Mason Point Lot 46 – 141 Old Barn Way
Fuquay-Varina, Harnett County, North Carolina
Project #: 2031

Mr. Currin:

Central Carolina Soil Consulting (CCSC) in conjunction with Bateman Civil Survey Company have reviewed plumbing receipt from Thornton's Plumbing Inc. Based on our review of the fixtures listed, all fixtures were installed as proposed except for the master shower, it changed from a Moen T182ep 1.75 gpm to a Moen L2352 with a 2.5gpm flow rate and the Kitchen sink faucet changed from a Moen 7430 1.5gpm to a 7864srs 1.5gpm. The overall flow reduction changed from 39% to 37%. We have attached a revised fixture spreadsheet and specifications for the new fixtures listed above.

With respect to increased effluent strength, we do not believe that the effluent strength will increase with the addition of a bedroom. The fixtures that are currently installed in the home are standard low flow fixtures that are installed in all of the homes built by KB Homes. These fixtures are used in houses all over the country and have been used for several decades. The additional bedroom will increase the volume of effluent, but will not change the strength of the effluent and should be consistent with levels required for residential waste in 15A NCAC 18A .1970 b, table 8.

We have reviewed the design and installation of the system located at 141 Old Barn Way and are satisfied that the tanks and drainfield are installed per the permit and are capable of handling the additional bedroom without modification.

Attached is a revised flow reduction packet with specification sheets for the new fixtures and updated calculations. If the home owner wants to increase the flow rate of any fixture they will need to get approval from Harnett County Environmental Health and the designing Engineer.

Should you have any questions or comments please contact Matt Burdette at 919-422-2827 or Tom Speight with Bateman Civil Survey Company – 2524 Reliance Ave. Apex NC 27539 – (919) 577-1080

Sincerely,

CENTRAL CAROLINA SOIL CONSULTING PLLC

BATEMAN CIVIL SURVEY COMPANY



Matt Burdette
Environmental Specialist



Tom Speight, P.E.
(seal)



Attachments

Lot 46 Mason Pointe						
	Item		Gal/min. or flush	Number of Fixures	Base Flow From 1982	Percent Water Savings
Bath 2	Tub/Shower Trim	Moen T183ep	1.75 gal/minute	1	5.5 gal/minute	68%
	Lavatory Faucet	Moen 4925	1.5 gal/minute	1	3.0 gal/minute	50%
Powder	Lavatory Faucet	Moen 4925	1.5 gal/minute	1	3.0 gal/minute	50%
Master Bath	Shower Trim	Moen L2352	2.5 gal/minute	1	5.5 gal/minute	54%
	Lavatory Faucet	Moen 4925	1.5 gal/minute	2	3.0 gal/minute	50%
	Tub	Fill & Release	Fill & Release	1	Fill & Release	0%
Kitchen	Kitchen Sink Faucet	Moen 7430	1.5 gal/minute	1	3.0 gal/minute	50%
	Dishwasher	Whirlpool WDT710PAHZ	*3.5 gal/load (Energy Star)	1	10.0 gal/load	65%
Bedroom Bath 5	Tub/Shower Trim	Moen T183ep	1.75 gal/minute	1	5.5 gal/minute	68%
	Lavatory Faucet	Moen 4925	1.5 gal/minute	1	3.0 gal/minute	50%
Toilets	2, Master, Powder, 5	Gerber 21-912	1.28 gal /flush	4	3.5 gal/minute	63%

FIXTURES	TOILET	FAUCET	SHOWER	LEAK	BATH	OTHER	DISHWASHER	LAUNDRY	TOTALS
PERCENT OF HOUSE HOLD WATER USE	24%	20%	20%	12%	3%	3%	2%	16%	100%
GALLONS PER DAY (600 BASE)	144	120	120	72	18	18	12	96	600
PERCENT OF SAVINGS FROM WATER SAVING FIXURES	63%	50%	63%	0%	0%	0%	0%	0.0%	37%
ADJUSTED FLOW (GALLONS)	53	60	45	72	18	18	12	96	374

DESCRIPTION

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

OPERATION

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

FLOW

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

CARTRIDGE

- 1255™ Duralast™ cartridge for Single-Handle Faucets
- Engineered polymers, non-ferrous and stainless steel materials

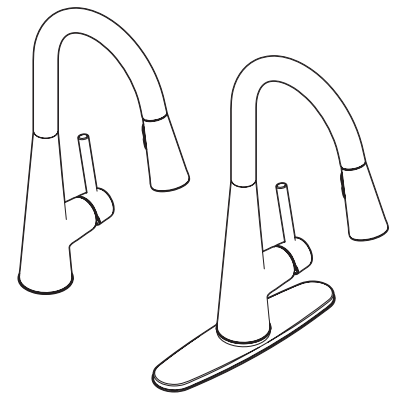
STANDARDS

- Third party certified to IAPMO Green, ASME A112.18.1/CSA B-125.1 and all applicable requirements referenced therein including NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- ADA ♿ for lever handle
- The backflow protection system in this device consists of two independently operating check valves, a primary and a secondary which prevent backflow

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

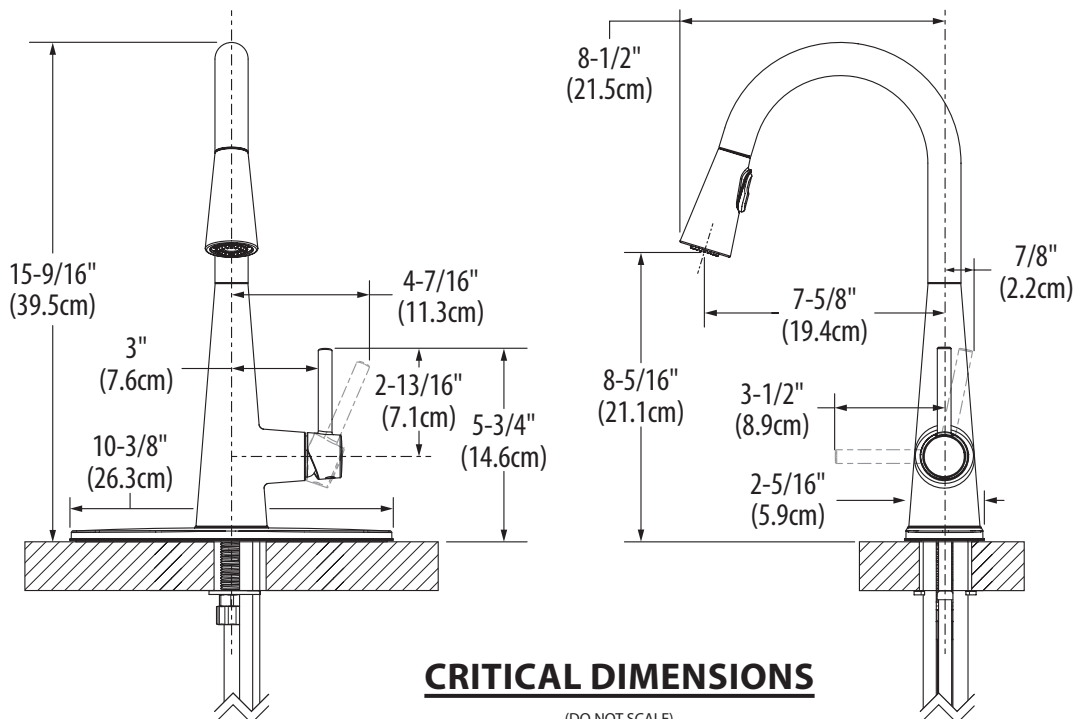
Visit www.moen.com/support for complete details and limitations



Sleek™
Single-Handle High Arc
Pulldown Kitchen Faucet

Models: 7864 series

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





Buy it for looks. Buy it for life.®

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

DESCRIPTION

- Chrome plated metal construction with various finishes identified by suffix
- Pressure balancing cycle valve design with an adjustable temperature limit stop
- 1/2" CC connections
- Includes showerhead, arm and flange

OPERATION

- Lever style handle
- 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) Max
- EP suffix models are limited to 1.75gpm (6.6 L/min) Max

CARTRIDGE

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

STANDARDS

- Third party certified to meet ASSE 1016, 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 consumer purchaser
- 5 year warranty if used in commercial installations

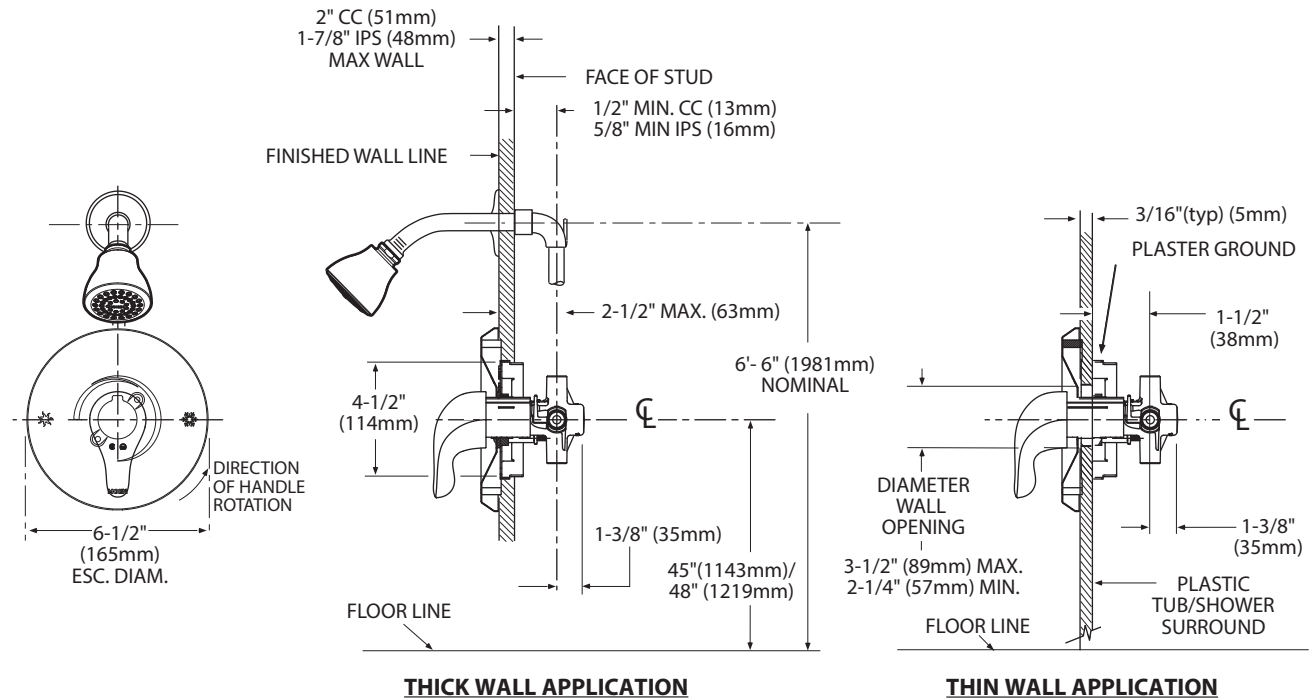
Specifications



**CHATEAU® POSI-TEMP®
Single-Handle Shower Valve**

**Model: L2352
L2352EP**

Model: L2362 (with 1/4 Turn Stops)



CRITICAL DIMENSIONS

(DO NOT SCALE)

FOR MORE INFORMATION CALL: 1-800-BUY-MOEN

www.moen.com



Buy it for looks. Buy it for life.®

Specifications

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CARTRIDGE

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

STANDARDS

- Third party certified to meet ASSE 1016, ASME A112.18.1/CSA B125.1, A117.1 and all applicable requirements referenced therein
- **ADA**  for lever handle

WARRANTY

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



CHATEAU® POSI-TEMP® Single-Handle Shower Valve

Model: L2352 series

Model: L2362 (with 1/4 Turn Stops)

