

# ENGINEERING COMMUNIQUÉ



JULY 2021 • VOLUME 2 • ISSUE 3

**JERRY MCDANAL**

*CET, CPD-EMMERITUS, FASPE*

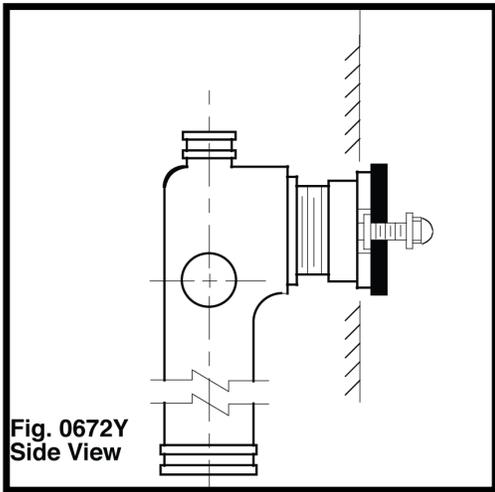


Fig. 0672Y  
Side View

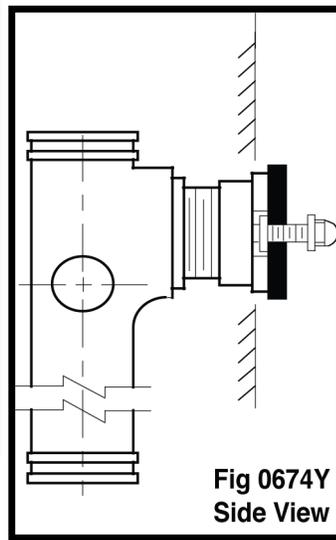


Fig 0674Y  
Side View



## TYPE 2 & TYPE 2M COUPLINGS FOR USE WITH BACK OUTLET BOWLS

### TOPICS:

- NO-HUB INLET STACK FITTINGS (0672Y, 0674Y)

The back-outlet floor mounted toilet bowl is popular with architects and engineers for hospitals and related projects. A key reason is apprehension over using off-the-floor (wall hung) bowls due to the potential use by bariatric patients. Since the load on the bowl is transferred directly to the floor structure, there is less chance of related failure. When using a back-outlet bowl, the piping is kept above the floor and in the pipe chase eliminating additional openings in the floor when using a bottom outlet bowl. Figure number 0674Y stack fitting may be used with the back-outlet bowls. The 0674Y requires a type 2 coupling and gasket. The Type 2 coupling has 'ears' on the right & left sides with a vertical slot 6" (150) on center. This aligns with the holes in the back of the bowl and threaded rod is extended through the bowl, gasket, coupling and is tightened to achieve a watertight connection.

The Type 2 coupling is oblong in shape, but the discharge area and threaded portion is concentric for proper alignment to the horn on the rear of the bowl. The oblong shape with 1" (25) vertical slots in the 'ears' allows for a ½" adjustment up or down for variation in the finished floor elevation. Please refer to the attached submittal.

When a fixture manufacturer makes a change to a fixture whether it is a lavatory, urinal, or water closet, we are the last to learn of the revision. Unfortunately, it is always after field installation when there is a problem. Over the years, some of the fixture manufacturers have experimented with the design of their outlets on their bowls. Usually this results in problems for both the fixture manufacturer and fixture support manufacturer.

The vitreous china fixture standard indicates the outlet horn and related dimensions shall be concentric. The horn dimension must be concentric for proper mating to the nipple/coupling. The sealing surface must be adequate around the horn to compensate for roughing-in dimensions above or below the recommended roughing-in dimensions and for variations in the finished floor elevation.

The regular 0200 series horizontal water closet support can be used with floor mounted back-outlet bowls. In some layouts, the use of a horizontal fitting is required to keep the piping above the floor in a horizontal battery. In this case, the 0200 series can be supplied with a Type 2 outlet connection.



# 0672Y, 0674Y

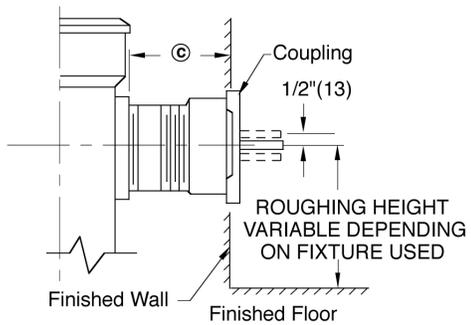
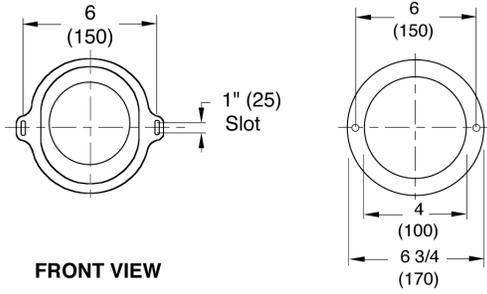
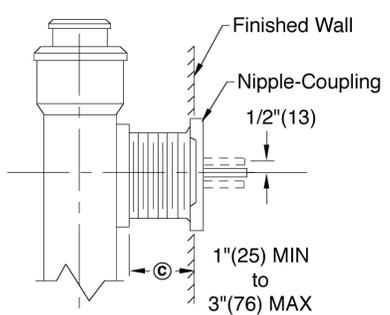
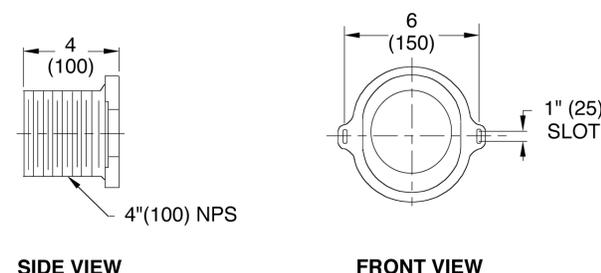
## Inlet Stack Fittings for Hub and Spigot Systems For Use with Floor Mounted Back Outlet Water Closets

<b>G</b>	<b>JAY R. SMITH MFG. CO.®</b> <small>MEMBER OF MORRIS GROUP INTERNATIONAL          POST OFFICE BOX 3237          MONTGOMERY, ALABAMA 36109-0237 (USA)          TEL: 334-277-8520 FAX: 888-377-7818 www.jrsmith.com</small>	   <small>MEMBER OF:</small>	<b>LOCATION</b>																																																				
DRAWING NUMBER <b>S0672Y</b>	<h3>NO-HUB INLET STACK FITTINGS</h3>																																																						
SCALE: <b>NONE</b>	<p><b>FUNCTION:</b> Recommended for use with a floor mounted back outlet water closet.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>Fig 0674Y</b> Side View</p> </div> <div style="text-align: center;"> <p><b>Fig 0672Y</b> Side View</p> </div> </div> <p>Labels for Fig 0672Y: Finished Wall, C.P. Cap Nuts and Washers, Closet Outlet Gasket, 4"(100) Adjustable Coupling, 20 (510), 2 3/8(60), 2(51), A, C, 1 1/2"(38) or 2"(51) N.P.T. Aux. Inlet Available, add Suffix-N, 4 (100), 20 (510), 4 (100).</p> <p><b>NOTE:</b> Dimensions shown in parentheses are in millimeters.</p> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Fig. 0672Y . . . NO-HUB Long Barrel With 2"(51) Vent  <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></div> Fig. 0674Y . . . NO-HUB Long Barrel With 4"(100) Vent         </div> <p>Ⓒ Dimension as regularly furnished permits a dimension of 3"(76) MIN to 4"(100) MAX. Coupling provides 1/2"(13) adjustment in either direction. Always specify Ⓒ dimension required. Minimum Ⓒ dimension of 1"(25) available using special male end coupling (see type 2M below).</p> <p><b>NOTE:</b> When required a 2"(51) NO-HUB Aux. inlet adapter is available specify suffix-NY</p> <div style="border: 1px solid black; padding: 5px; font-size: 8px;">             The water closet gasket regularly furnished is designed to fit water closet outlet dimensions and configurations shown in ANSI Standard A112.19.2. If gasket is not found to be compatible to fixture due to nonconformance of said fixture to ANSI A112.19.2, then fixture manufacturer shall be consulted for a suitable gasket recommendation. Jay R. Smith assumes no liability for connections to fixtures which do not conform to these standards.         </div>																																																						
DATE: <b>8-21-72</b>	<p>WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA</p>																																																						
APPROVED BY:	<p>Labels: Vent, 4(100), 4(100), 4(100), 4(100)</p> <p><b>Front View</b></p>																																																						
CHECKED BY: <b>RP</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>FIG NO</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>0672Y</td> <td>4(100)</td> <td>7(180)</td> </tr> <tr> <td>0674Y</td> <td>4(100)</td> <td>5(125)</td> </tr> </tbody> </table>			FIG NO	A	B	0672Y	4(100)	7(180)	0674Y	4(100)	5(125)																																											
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DRAWN BY: <b>JH</b>	<p><b>TYPICAL APPLICATION</b></p>																																																						
DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE	<p><b>OUTLET CONNECTIONS</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>FRONT</b></p> </div> <div style="text-align: center;"> <p><b>SIDE</b></p> </div> <div style="text-align: center;"> <p><b>SIDE</b></p> </div> </div> <p>Labels: 6 (150), Δ 1" (25) Slot Provides 1/2" (13) Adjustment Up or Down for Variation in Finished Floor, Finished Wall, Nipple, Coupling, Δ 1/2" (13), Roughing Height Variable Depending on Fixture Used, Δ 1/2" (13), Finished Floor, Nipple-Coupling, Δ 1/2" (13).</p> <p><b>REGULARLY FURNISHED</b>      <b>TYPE 2M (When Specified)</b></p>																																																						
<b>0672Y, 0674Y</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">NIPPLE LENGTHS AVAILABLE</th> </tr> <tr> <th>NIPPLE LENGTH</th> <th>MIN</th> <th>Ⓒ</th> <th>MAX</th> </tr> </thead> <tbody> <tr><td>2 1/2 (64)</td><td>2 3/4 (70)</td><td>3 3/4 (95)</td><td></td></tr> <tr><td>3 1/4 (83)</td><td>3 (76)</td><td>4 1/2 (115)</td><td></td></tr> <tr><td>4 1/2 (115)</td><td>4 1/4 (110)</td><td>5 3/4 (145)</td><td></td></tr> <tr><td>5 1/4 (135)</td><td>5 (125)</td><td>6 1/2 (165)</td><td></td></tr> <tr><td>6 1/4 (160)</td><td>6 (150)</td><td>7 1/2 (190)</td><td></td></tr> <tr><td>7 (180)</td><td>6 3/4 (170)</td><td>8 1/4 (210)</td><td></td></tr> <tr><td>8 1/4 (210)</td><td>8 (205)</td><td>9 1/2 (240)</td><td></td></tr> <tr><td>10 (255)</td><td>9 3/4 (250)</td><td>11 1/4 (285)</td><td></td></tr> <tr><td>12 (305)</td><td>11 3/4 (300)</td><td>13 1/4 (335)</td><td></td></tr> <tr><td>15 (380)</td><td>14 3/4 (375)</td><td>16 1/4 (415)</td><td></td></tr> <tr><td>18 (455)</td><td>17 3/4 (450)</td><td>19 1/4 (490)</td><td></td></tr> </tbody> </table> <p style="text-align: right; font-size: 8px;">* Regularly Furnished</p>			NIPPLE LENGTHS AVAILABLE				NIPPLE LENGTH	MIN	Ⓒ	MAX	2 1/2 (64)	2 3/4 (70)	3 3/4 (95)		3 1/4 (83)	3 (76)	4 1/2 (115)		4 1/2 (115)	4 1/4 (110)	5 3/4 (145)		5 1/4 (135)	5 (125)	6 1/2 (165)		6 1/4 (160)	6 (150)	7 1/2 (190)		7 (180)	6 3/4 (170)	8 1/4 (210)		8 1/4 (210)	8 (205)	9 1/2 (240)		10 (255)	9 3/4 (250)	11 1/4 (285)		12 (305)	11 3/4 (300)	13 1/4 (335)		15 (380)	14 3/4 (375)	16 1/4 (415)		18 (455)	17 3/4 (450)	19 1/4 (490)	
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FIGURE NUMBER	G T R	5-13-13 3-6-97 6-22-94	Revised Text Added Millimeters Revised	TBW EMB EMB	CL BS BS	WEIGHT POUNDS	VOLUME CUBIC FEET	<b>FIGURE NUMBER</b> <b>0672Y, 0674Y</b>																																															
REV.	DATE	DESCRIPTION			BY	CKD. BY																																																	

**WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

# TYPE NO. 2 OUTLET CONNECTION

## Nipple and Coupling Outlet Connection

C	SMITH® JAY R. SMITH MFG. CO.® MEMBER OF MORRIS GROUP INTERNATIONAL POST OFFICE BOX 3237 MONTGOMERY, ALABAMA 36109-0237 (USA) TEL: 334-277-8520 FAX: 888-377-7818 www.jrsmith.com	  	LOCATION
DRAWING NUMBER S0100-2	<b>TYPE NO. 2 NIPPLE AND COUPLING OUTLET CONNECTION</b>		
SIZE A			
SCALE: NONE			
DATE: 7-24-86	<p><b>NOTES:</b></p> <p>The 4"(100) adjustable coupling is provided with vertical slotted ears which permits a 1/2"(13) adjustment up or down for variation in finished floor height.</p> <p>Coupling should extend beyond the wall adequately to apply sufficient and uniform pressure on the gasket to produce a watertight seal. It is the Installer's responsibility to make this final adjustment.</p> <p>Smith furnishes the Type No. 2 outlet connection for use with floor mounted back outlet bowls. The Type No. 2 connection and coupling arrangement whose length is specified by © dimension.</p> <p>© dimension is the measurement from the face of the fitting to the finished wall.</p>		
APPROVED BY: JD	<p><b>NOTE ON CUTTING</b></p> <p>Nipple lengths shown in chart are standard lengths available. When a non-standard nipple length is required, the next longer size can be cut. A cutting charge will be added for nipples cut at plant.</p> <p>Nipples can be field cut if necessary. Sufficient length of straight thread (as shown in chart) is supplied for this purpose.</p>		
CHECKED BY: JD	<p><b>NOTE:</b> Dimensions shown in parentheses are shown in millimeters.</p>		
DRAWN BY: CMB	<p style="text-align: center;"><b>FOR SMALLER © DIMENSION</b></p> <p style="text-align: center;"><b>TYPE 2M COMBINATION NIPPLE COUPLING IN AVAILABLE WHEN SPECIFIED</b></p>  		
TYPE NO. 2 OUTLET CONN.	<p style="text-align: center;">Type 2M is regularly furnished 4"(100) long, cut 1"(25) off end of coupling when used for © of 1 1/2"(38) or less.</p>		
FIGURE NUMBER	C A	2-27-12 4-11-95 7-24-86	Revised Notes REVISED DIMENSIONS REVISED TYPESETTING
DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE	REV.	DATE	DESCRIPTION
	TBW CMB CM	AM BS	WEIGHT POUNDS
	BY	CKD. BY	VOLUME CUBIC FEET
	<b>FIGURE NUMBER TYPE NO. 2 OUTLET CONN.</b>		

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