INDUSTRIAL WASHERS
MODEL T-350/450/650/750/950/1450 EXPRESS
MODEL T-675/975/1475 EXPRESS PLUS
ON-PREMISE O-SERIES CONTROL

DEXTER. LAUNDRY

OPERATOR'S MANUAL
INSTALLATION & OPERATION
INSTRUCTIONS

Please read this information and retain for reference.

WARNING - THIS WASHER IS EQUIPPED WITH DEVICES AND FEATURES RELATING TO ITS SAFE OPERATION. TO AVOID INJURY OR ELECTRICAL SHOCK, DO NOT PERFORM ANY SERVICING UNLESS QUALIFIED TO DO SO.

IT IS THE RESPONSIBILITY OF THE OWNER TO CHECK THIS EQUIPMENT ON A FREQUENT BASIS TO ASSURE ITS SAFE OPERATION.

A machine should NOT be allowed to operate if any of the following occur:

- Excessively high water level.
- If machine is not connected to a properly grounded circuit.
- If the door does not remain securely locked during the entire cycle.
- Vibration or shaking from an inadequate mounting or foundation.

WARNING - SAFETY PRECAUTIONS

- Always shut off power and water supply before servicing.
- Do not overload the washer.
- Do not open door when cylinder is in motion or it contains water.
- Do not bypass any safety devices of this washer.
- Do not use volatile or flammable substances in or near this washer.
- Keep all panels in place. They protect against shock and injury and add rigidity to the washer.

PREVENTIVE MAINTENANCE REQUIREMENTS

DAILY

- Check that the loading door remains securely locked and cannot be opened during an entire cycle.
- Clean the top, front, and sides of the cabinet to remove residue.
- Clean the soap dispenser and lid and check that all dispenser mounting screws are in-place and tight.
- Check the loading door for leaks. Clean the door seal of all foreign matter.
- Leave the loading door open to aerate the washer when not in use.

QUARTERLY

- Make sure the washer is inoperative by switching off the main power supply.
- Check the V-belts for wear and proper tension.
- Clean lint and other foreign matter from around motor.
- Check all water connections for leaks.
- Check the drain valve for leaking and that it opens properly.
- Wipe and clean the inside of the washer and check that all electrical components are free of moisture and dust.
- Remove and clean water inlet hose filters. Replace if necessary.
- Check anchor bolts. Retighten if necessary.

IMPORTANT: Replace any and all panels that were removed to perform daily and/or quarterly maintenance.

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1 WASHER SPECIFICATION SHEETS

EXPRESS MODELS

			T-350		T-450		T-650		T-750		T-950		T-1450	
Capacity	Dry Weight Capacity - lb (kg)		20	(9.1)	30	(13.6 kg)	40	(18.1)	50	(22.7)	60	(27.2)	90	(40.8)
	Cylinder Volume - cu ft (L)		2.7	(76.5)	3.8	(107.6 L)	6	(170)	6.5	(184.1)	9	(254.9)	13.7	(388)
Speed	High Extract Speed - g (RPM)		200	(819)	200	(750 RPM)	200	(750)	200	(685)	200	(685)	200	(617)
	Intermediate Extract Speed - g (RPM)		60	(449)	60	(411 RPM)	60	(411)	60	(375)	60	(375)	60	(338)
	Washing Speed - g (RPM)		0.9	(55)	0.9	(50 RPM)	0.9	(50)	0.9	(43)	0.9	(43)	0.9	(39)
	Motor Size - hp (kW)		1	(0.75)	2	(1.5 kW)	2	(1.5)	3	(2.2)	3	(2.2)	7.8	(5.8)
Dimensions	Cabinet Height - in (cm)		43 7/8	(111.4)	48 3/16	(122.4 cm)	53	(134.6)	55 3/8	(140.7)	55 3/8	(140.7)	62 3/8	(158.4)
	Cabinet Width - in (cm)		26	(66)	29 7/8	(75.9 cm)	29 7/8	(75.9)	34 3/8	(87.3)	34 3/8	(87.3)	41 1/2	(105.4)
	Cabinet Depth - in (cm)		28	(71.1)	28 1/4	(71.8 cm)	38 1/8	(96.8)	32 7/8	(83.5)	38 7/8	(98.7)	42 1/4	(107.3)
	Door Opening - in (cm)		12 1/4	(31.1)	15 1/4	(38.7 cm)	15 1/4	(38.7)	19 1/4	(48.9)	19 1/4	(48.9)	19 1/4	(48.9)
	Floor to Door Bottom - in (cm)		14 7/8	(37.8)	16 1/4	(41.3 cm)	16 1/4	(41.3)	16	(40.6)	16	(40.6)	19 5/16	(49.1)
	Cylinder Diameter - in (cm)		21	(53.3)	25	(63.5 cm)	25	(63.5)	30	(76.2)	30	(76.2)	37	(94)
	Cylinder Depth - in (cm)		13 1/2	(34.3)	13 3/8	(34 cm)	21 1/8	(53.7)	16	(40.6)	22	(55.9)	22	(55.9)
Weight	Net Weight - lb (kg)		383	(173.7)	526	(238.6 kg)	744	(337.5)	925	(419.6)	1000	(453.6)	1322	(599.6)
Shipping	Shipping Weight - lb (kg)		407	(184.6)	544	(246.8 kg)	766	(347.5)	952	(431.8)	1016	(460.8)	1364	(618.7)
	Shipping Height - in (cm)		49 1/4	(125.1)	53 1/4	(135.3 cm)	58 3/4	(149.2)	61 1/2	(156.2)	61 1/2	(156.2)	69 1/4	(175.9)
	Shipping Width - in (cm)		28 1/4	(71.8)	31 1/2	(80 cm)	31 1/2	(80)	36	(91.4)	36	(91.4)	43 1/8	(109.5)
	Shipping Depth - in (cm)		33 1/2	(85.1)	33 1/2	(85.1 cm)	43 3/4	(111.1)	38	(96.5)	45 1/4	(114.9)	48	(121.9)
Water	Water Inlet Size - in (mm)		3/4	(19)	3/4	(19 mm)	3/4	(19)	3/4	(19)	3/4	(19)	3/4	(19)
	Pressure (min-max) - psi (kPa)		30-120	(207-827)	30-120	(207-827 kPa)	30-120	(207-827)	30-120	(207-827)	30-120	(207-827)	30-120	(207-827)
	Flow Rate - gal/min (L/min)		9	(34)	9	(34)	9	(34)	9	(34)	9 & 12	(34 & 45)	9 & 12	(34 & 45)
	Drain Diameter (O.D.) - in (cm)		2 1/4	(5.7)	3	(7.6 cm)	3	(7.6)	3	(7.6)	3	(7.6)	3	(7.6)
	Floor to Center of Drain - in (cm)		6	(15.2)	5	(12.7 cm)	6 7/8	(17.5)	6 5/8	(16.8)	6 5/8	(16.8)	8 5/16	(21.1)
Electrical	Model	Volts / Hz / Phase / Wiring	Circuit Breaker Amps / Running Amps / Wire Size											
	-12	208-240 / 60 / 1 / 2 wire + ground	15 / 6.2 / #12		15 / 6.2 / #12		15 / 6.2 / #12		20/ 8.4 / #12		20/ 12 / #12		30 / 15 / #10	
		208-240 / 60 / 3 / 3 wire + ground												
	-13	208-240 / 60 / 3 / 3 wire + ground	---		---		40 / 40 / #8		---		60 / 60 / #6		60 / 60 / #4	
	-39	230 / 50 / 1 / 2 wire + ground	15 / 6.2 / 3.5 mm2		15 / 6.2 / 3.5 mm2		15 / 6.2 / 3.5 mm2		20 / 8.4 / 3.5 mm2		20 / 12 / 3.5 mm2		30 / 15 / 5.3 mm2	
	-68	400 / 50 / 3 / 4 wire + ground	---		---		30 / 30 / 8.4 mm2		---		40 / 40 / 8.4 mm2		---	
Installation	Min. Clearance Between Machines - in (cm)		1/2	(1.3)	1/2	(1.3)	1/2	(1.3)	1/2	(1.3)	1/2	(1.3)	1/2	(1.3)
	Min. Clearance Behind Machines - in (cm		24	(61)	24	(61)	24	(61)	24	(61)	24	(61)	24	(61)
	Min. Concrete Thickness - in (cm)		6	(15.2)	6	(15.2)	8	(20.3)	8	(20.3)	8	(20.3)	12	(30.5)

EXPRESS PLUS MODELS

			T-675		T-975		T-1475	
Capacity	Dry Weight Capacity - lb (kg)		40	(18.1)	60	(27.2)	90	(40.8)
	Cylinder Volume - cu ft (L)		6	(170)	9	(254.9)	13.7	(388)
Speed	High Extract Speed - g (RPM)		300	(919)	400	(969)	300	(756)
	Intermediate Extract Speed - g (RPM)		60	(411)	60	(375)	60	(338)
	Washing Speed - g (RPM)		0.9	(50)	0.9	(43)	0.9	(39)
	Motor Size - hp (kW)		3	(2.2)	6.7	(5)	7.8	(5.8)
Dimensions	Cabinet Height - in (cm)		53	(134.6)	55 3/8	(140.7)	62 3/8	(158.4)
	Cabinet Width - in (cm)		29 7/8	(75.9)	34 3/8	(87.3)	41 1/2	(105.4)
	Cabinet Depth - in (cm)		38 1/8	(96.8)	38 7/8	(98.7)	42 1/4	(107.3)
	Door Opening - in (cm)		15 1/4	(38.7)	19 1/4	(48.9)	19 1/4	(48.9)
	Floor to Door Bottom - in (cm)		16 1/4	(41.3)	16	(40.6)	19 5/16	(49.1)
	Cylinder Diameter - in (cm)		25	(63.5)	30	(76.2)	37	(94)
	Cylinder Depth - in (cm)		21 1/8	(53.7)	22	(55.9)	22	(55.9)
Weight	Net Weight - lb (kg)		744	(337.5)	1000	(453.6)	1322	(599.6)
Shipping	Shipping Weight - lb (kg)		766	(347.5)	1016	(460.8)	1364	(618.7)
	Shipping Height - in (cm)		58 3/4	(149.2)	61 1/2	(156.2)	69 1/4	(175.9)
	Shipping Width - in (cm)		31 1/2	(80)	36	(91.4)	43 1/8	(109.5)
	Shipping Depth - in (cm)		43 3/4	(111.1)	45 1/4	(114.9)	48	(121.9)
Water	Water Inlet Size - in (mm)		3/4	(19)	3/4	(19)	3/4	(19)
	Pressure (min-max) - psi (kPa)		30-120	(207-827)	30-120	(207-827)	30-120	(207-827)
	Flow Rate - gal/min (L/min)		9	(34)	9 & 12	(34 & 45)	9 & 12	(34 & 45)
	Drain Diameter (O.D.) - in (cm)		3	(7.6)	3	(7.6)	3	(7.6)
	Floor to Center of Drain - in (cm)		6 7/8	(17.5)	6 5/8	(16.8)	8 5/16	(21.1)
Electrical	Model	Volts / Hz / Phase / Wiring	Circuit Breaker Amps / Running Amps / Wire Size					
	-12	208-240 / 60 / 1 / 2 wire + ground	15 / 10 / #12		30 / 15 / #10		30 / 20 / #10	
		208-240 / 60 / 3 / 3 wire + ground						
	-39	230 / 50 / 1 / 2 wire + ground	15 / 10 / 3.5 mm2		30 / 15 / 5.3 mm2		30 / 20 / 5.3 mm2	
Installation	Min. Clearance Between Machines - in (cm)		1/2	(1.3)	1/2	(1.3)	1/2	(1.3)
	Min. Clearance Behind Machines - in (cm		24	(61)	24	(61)	24	(61)
	Min. Concrete Thickness - in (cm)		8	(20.3)	8	(20.3)	12	(30.5)

NOTE:

For some models, Final Extract Speed is dependent on load and incoming voltage. Refer to the Electrical Installation section for more details.

2 INSTALLATION INSTRUCTIONS

All washers must be installed in accordance with all local, state and national building, electrical, plumbing and other codes in effect in the area.

WARNING:

THESE INSTALLATION AND SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED PERSONNEL ONLY. TO AVOID INJURY AND ELECTRICAL SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS, UNLESS QUALIFIED.

2.1 FOUNDATION REQUIREMENTS

This machine is designed for use on or over bare concrete floor - not to be used above combustible flooring, such as carpet or wood. The washer must be securely bolted **and grouted** to a substantial concrete floor or mounted **and grouted** upon a suitable base that is securely bolted **and grouted** to a substantial concrete floor. See Machine Grouting section for details.

CARE MUST BE TAKEN WITH ALL FOUNDATION WORK TO ENSURE A STABLE UNIT INSTALLATION, ELIMINATING POSSIBILITIES OF EXCESSIVE VIBRATION.

Allow a minimum 24 inches (610 mm) of clearance behind the rear of the machine to provide access for motor service.

Installation on an isolated pad is NOT recommended. Consult a structural engineer for installations that will not be tied to a surrounding floor.

2.2 MOUNTING HEIGHT

A concrete pedestal or steel-mounting base that elevates the machine above the floor level is suggested to provide easy access to the loading door.

Suggested Amount to Elevate Washer:

T-350: approximately 8 inches (203 mm)

T-450: approximately 6 inches (152 mm)

T-650/750/950/1450: approximately 4 inches (102 mm)

T-675/975/1475: approximately 4 inches (102 mm)

Contact a Dexter laundry equipment distributor for recommended steel mounting bases. Available steel mounting bases:

Washer	Part Number	Height
T-350	9945-121-001	8” (203 mm)
T-450	9945-123-001	6” (152 mm)
T-650/675	9945-145-001	6” (152 mm)
T-750	9945-117-001	6” (152 mm)
T-950/975	9945-103-001	4” (103 mm)

T-950/975	9945-118-001	6” (152 mm)
T-1450/1475	9945-145-001	4” (103 mm)

If an elevated concrete pedestal is desired, it should be embedded and tied into the existing floor. DO NOT install a pad on top of the existing floor. Cut through existing floor as shown below. See Machine Mounting Detail Figures for floor thickness and bolt sizes.

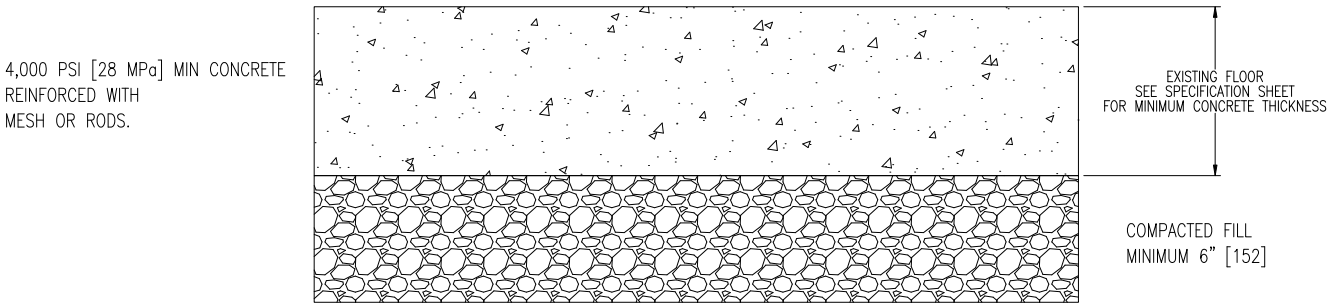
EXPANSION ANCHORS ARE NOT RECOMMENDED FOR USE IN CONCRETE PEDESTALS BECAUSE THE ANCHORS ARE TOO CLOSE TO AN EDGE, CAUSING IT TO BREAK OUT.

2.3 FOUNDATION AND PAD OPTIONS

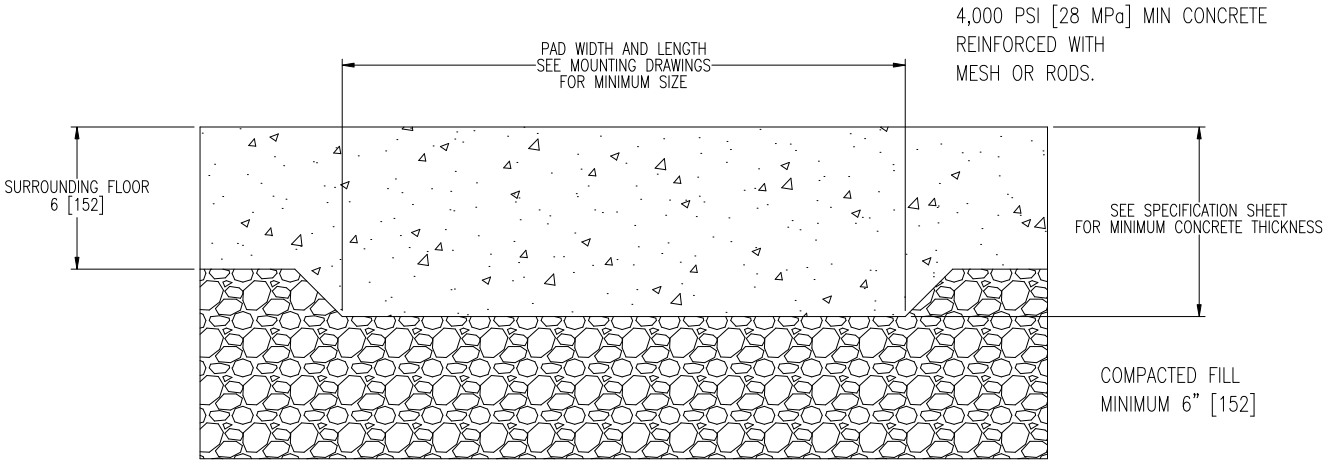
All installations require reinforced concrete floors. Refer to appropriate model Machine Mounting Detail Figures 1-1, 1-2 and 1-3 for minimum floor thickness and minimum pad sizes. See mounting diagram for overall washer dimensions.

Refer to appropriate model Figure 1-4 for side by side mounting dimensions.

2.3.1 WASHER INSTALLATION ON EXISTING FLOOR:



2.3.2 WASHER INSTALLATION ON NEW FLOOR:



2.3.3 NEW PAD TIED TO EXISTING FLOOR:

If the existing floor is not reinforced concrete that meets the minimum thickness requirements, DO NOT install a pad on top of the existing floor. The existing floor and the machine pad must be tied together as one piece as follows:

1) Cut an opening through the existing floor that is wider and deeper than the washer as shown below. See Machine Mounting Details for dimensions.

2) Excavate to a depth that allows for 6" [152] minimum of compacted fill plus the minimum required concrete thickness. Also excavate 2" [51] under the existing floor so that the new concrete is poured under the floor as well.

3) Back fill with clean fill dirt and compact dirt, making sure to allow for the minimum thickness concrete pad to be poured.

4) Drill holes around the perimeter of the existing floor to install reinforcing bars to tie the new pad to the existing floor. Drill 2-1/2" [64] deep into the existing floor on 12" [305] centers around the entire perimeter.

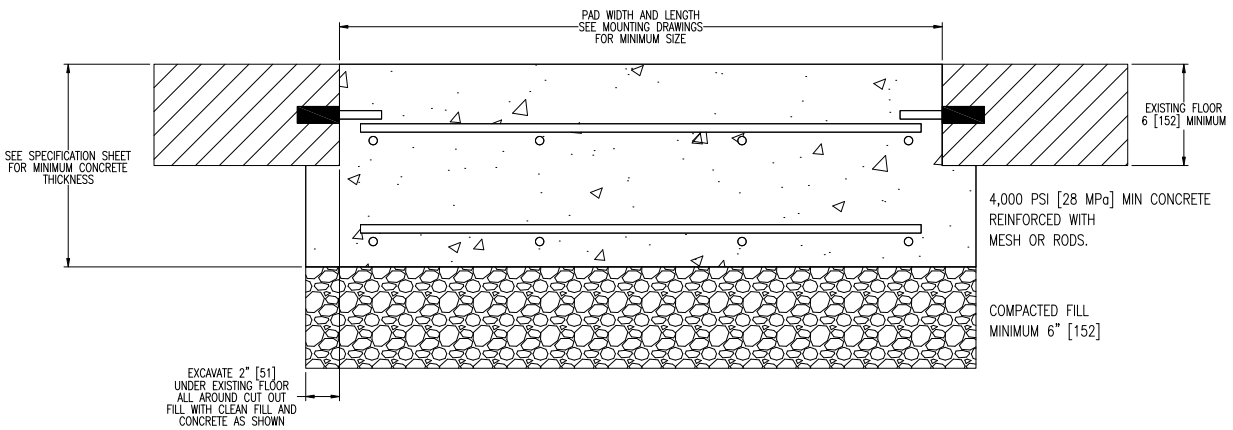
5) Clean holes and fill half-way with acrylic adhesive rated for commercial-grade machine installations.

6) Use #4 (60 ksi) reinforcing bar to tie the new pad to the existing floor. Tie the bars together at intersections and use supports to hold bars in the proper depth in the pad.

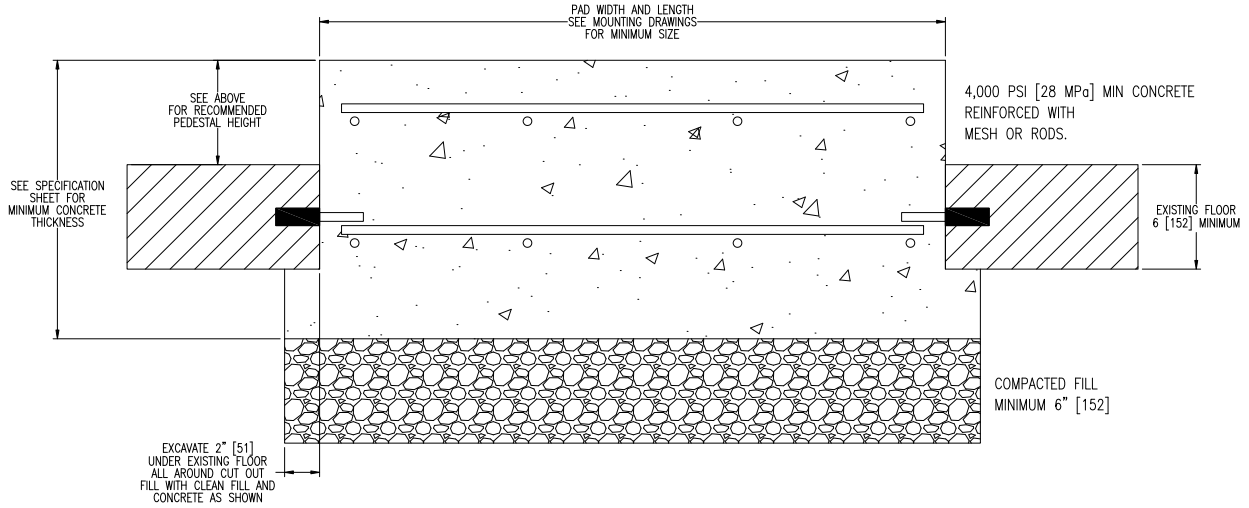
7) After adhesive has cured, pour 4000 psi concrete up to level with the existing floor plus any extra elevated pedestal desired 4-10" [102-254].

   Concrete must be done in one pour so that the entire pad cures as one piece.

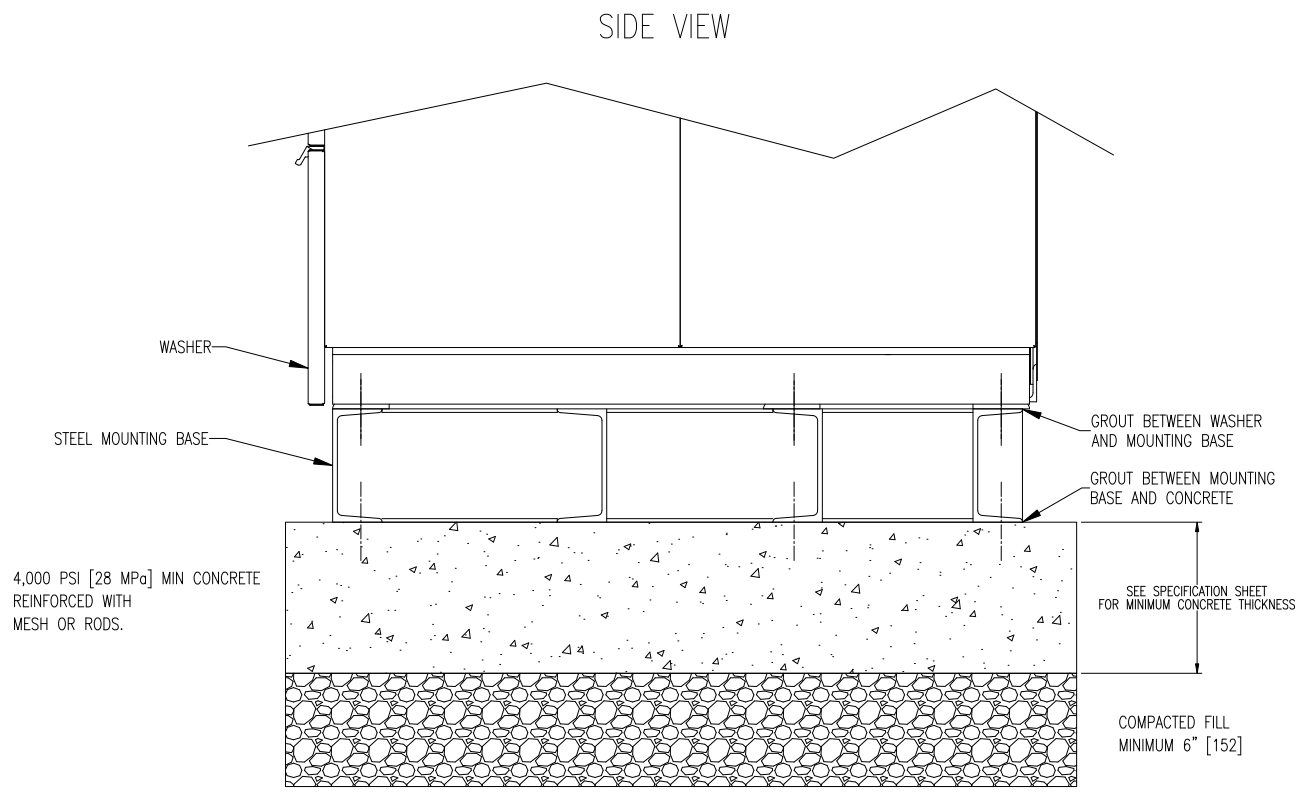
2.3.3.1 NEW PAD TIED TO EXISTING FLOOR (LEVEL WITH FLOOR):



2.3.3.2 NEW RAISED CONCRETE PEDESTAL TIED TO EXISTING FLOOR:



2.3.4 STEEL MOUNTING BASE ON CONCRETE FLOOR:



2.4 MACHINE ANCHORING

All installations require concrete floors and quality grade anchor bolts or expansion anchors. Mounting hardware is not provided with the machines. Refer to appropriate model Machine Mounting Detail Figures 1-1, 1-2 and 1-3 for floor thickness and bolt sizes. See mounting diagram for overall washer dimensions.

EXPANSION ANCHORS ARE NOT RECOMMENDED FOR USE IN RAISED CONCRETE PEDESTALS BECAUSE THE ANCHORS ARE TOO CLOSE TO AN EDGE, CAUSING IT TO BREAK OUT.

ANCHORING OPTIONS:

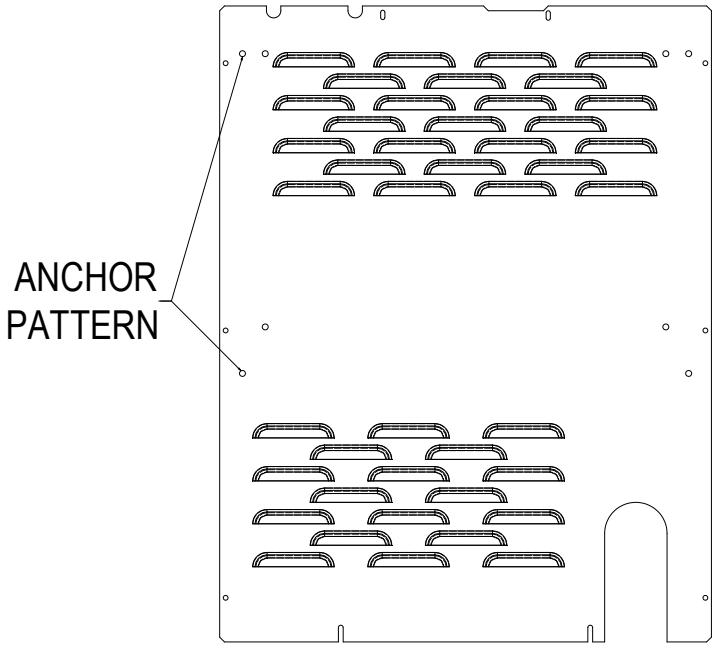
2.4.1 Cast in place bolts headed by square fish plates. See Machine Mounting Detail Figures 1-1 thru 1-3 for exact washer model.

Or after concrete has completely cured:

2.4.2 Use Hilti Adhesive System 'HAS' Rods and adhesive capsules. See Machine Mounting Detail Figures 1-1 thru 1-3 for exact washer model.

2.4.3 Or use an equivalently rated epoxy or acrylic adhesive anchor.

As an installation aid, the anchor pattern can be found on the back panel of the washers and can be used as a template. Compare panel to the mounting dimension drawing to find the right holes. Example:



2.5 MACHINE GROUTING

After concrete has cured completely and anchors have cured completely into place:

2.5.1 Position washer over the mounting anchors.

2.5.2 Raise the washer 1/2" [12.7] off the mounting surface and place spacers under the corners of the washer base.

2.5.3 Level the washer, leaving washer at least 1/2" [12.7] off the mounting surface.

Do not permanently support the washer with spacers under the corners. Machine must be grouted, and spacers must be removed.

2.5.4 Mix non-shrinking machinery grout according to the grout instructions. The grout should not be too runny or too firm. ***Completely fill*** *the 1/2" [12.7] space between the washer base and the mounting surface. Force grout under all base angles and plates until completely filled. Fill around all anchor bolts.*

2.5.5 Finger tighten all nuts to anchor bolts.

2.5.6 When the grout has started to stiffen (but before it is cured), remove the spacers from the corners and allow the washer to settle into the wet grout. Fill in any voids as necessary with additional grout.

2.5.7 Allow grout to completely cure, then tighten all nuts to securely fasten the washer to the grouted mounting surface.

2.5.8 Retighten nuts after 5 days of operation and check quarterly.

If using a steel mounting base, first grout the steel mounting base to the concrete floor using the above steps, then repeat the steps for mounting and grouting the washer to the steel mounting base.

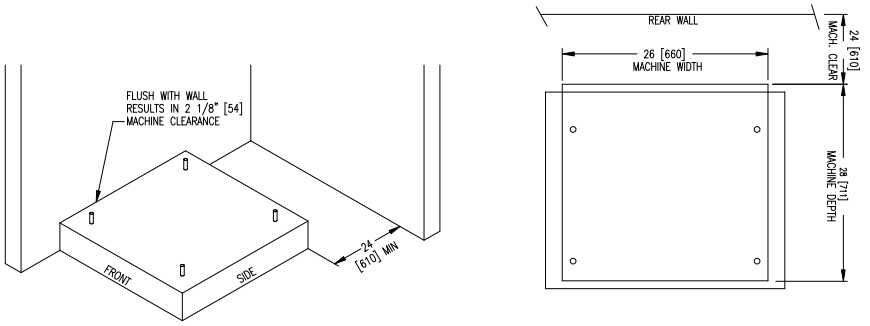
2.6 FLOOR LOAD DATA

DEXTER DYNAMIC LOADING CHART

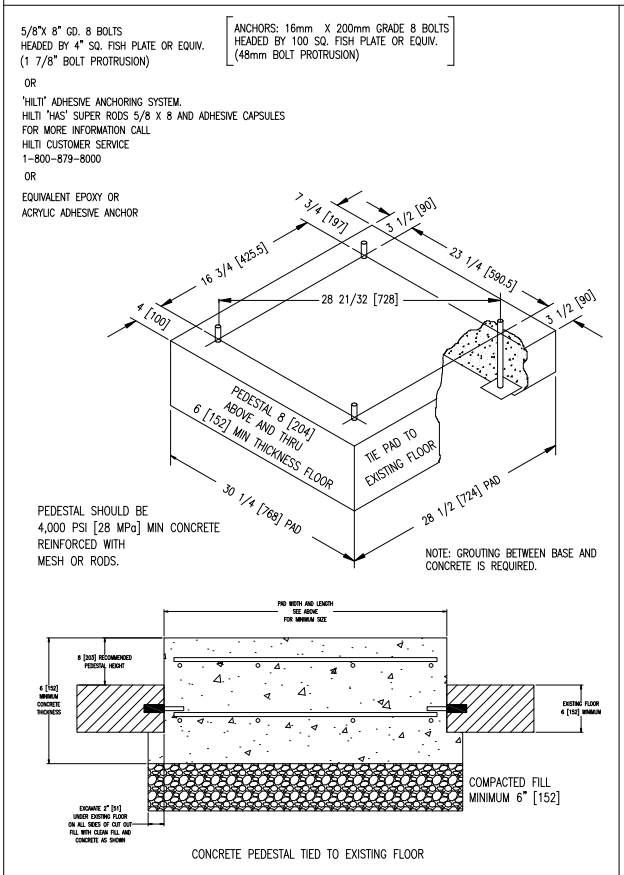
Model	Dry Weight Capacity (lb [kg])	Extract Speed (RPM)	Extract G-Force	Maximum Static Load (lb [kN])	Static Load Pressure (lb/sq ft [kN/ sq m])	Total Dynamic Load (lb [kN])	Dynamic Load Pressure (lb/sq ft [kN/ sq m])	Dynamic Load Frequency (Hz)	Maximum Vertical Load (lb]kN])	Maximum Moment About Washer Base (ft*lbs [m-kN])
Express Washers										
T-350	20 [9.1]	819	200	447 [2.0]	94 [4.5]	800 [3.6]	168 [8.0]	13.7	1203 [5.4]	1571 [2.1]
T-450	30 [13.6]	750	200	618 [2.7]	113 [5.4]	1200 [5.3]	220 [10.5]	12.5	1756 [7.8]	2631 [3.6]
T-650	40 [18.1]	750	200	882 [3.9]	134 [6.4]	1600 [7.1]	243 [11.6]	12.5	2384 [10.6]	3508 [4.8]
T-750	50 [22.7]	685	200	1119 [5.0]	166 [7.9]	2000 [8.9]	297 [14.2]	11.4	2970 [13.2]	4667 [6.3]
T-950	60 [27.2]	685	200	1206 [5.4]	150 [7.2]	2400 [10.7]	299 [14.3]	11.4	3460 [15.4]	5600 [7.6]
T-1450	90 [40.8]	617	200	1635 [7.3]	163 [7.8]	3600 [16.0]	360 [17.2]	10.3	5012 [22.3]	9413 [12.8]
Express Plus Washers										
T-675	40 [18.1]	919	300	882 [3.9]	134 [6.4]	1600 [7.1]	243 [11.6]	15.3	2384 [10.6]	3508 [4.8]
T-975	60 [27.2]	969	400	1206 [5.4]	150 [7.2]	2400 [10.7]	299 [14.3]	16.2	3460 [15.4]	5600 [7.6]
T-1475	90 [40.8]	756	300	1635 [7.3]	163 [7.8]	3600 [16.0]	360 [17.2]	12.6	5012 [22.3]	9413 [12.8]

Note: The out-of-balance loading conditions may vary depending on load size, model and material.

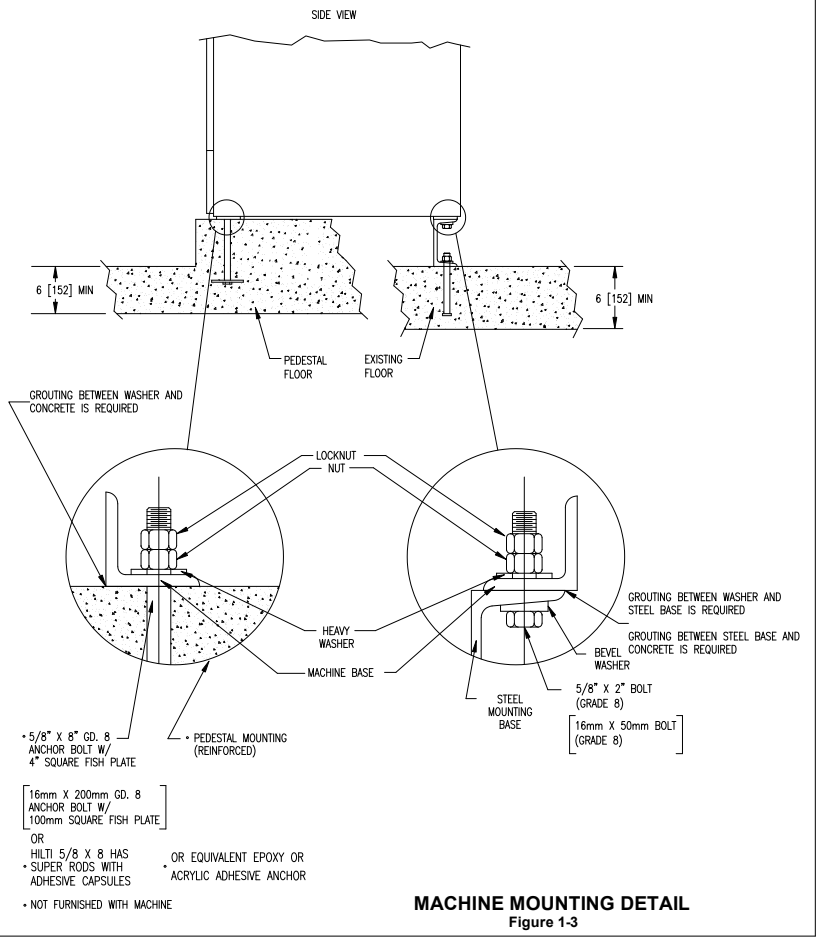
2.7 MACHINE MOUNTING DETAILS



FLOOR OUTLINE
Figure 1-2

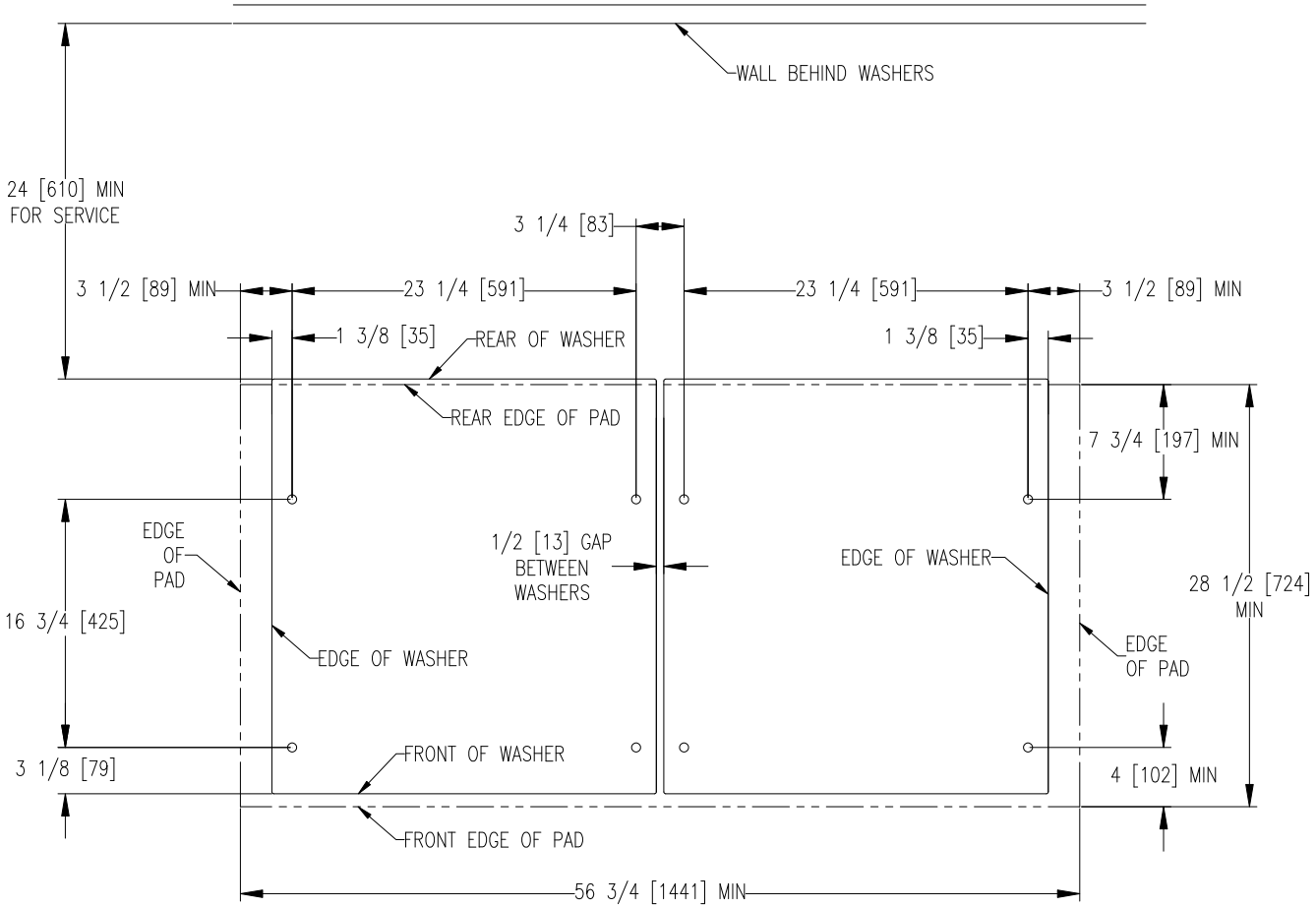


RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



MACHINE MOUNTING DETAIL
Figure 1-3

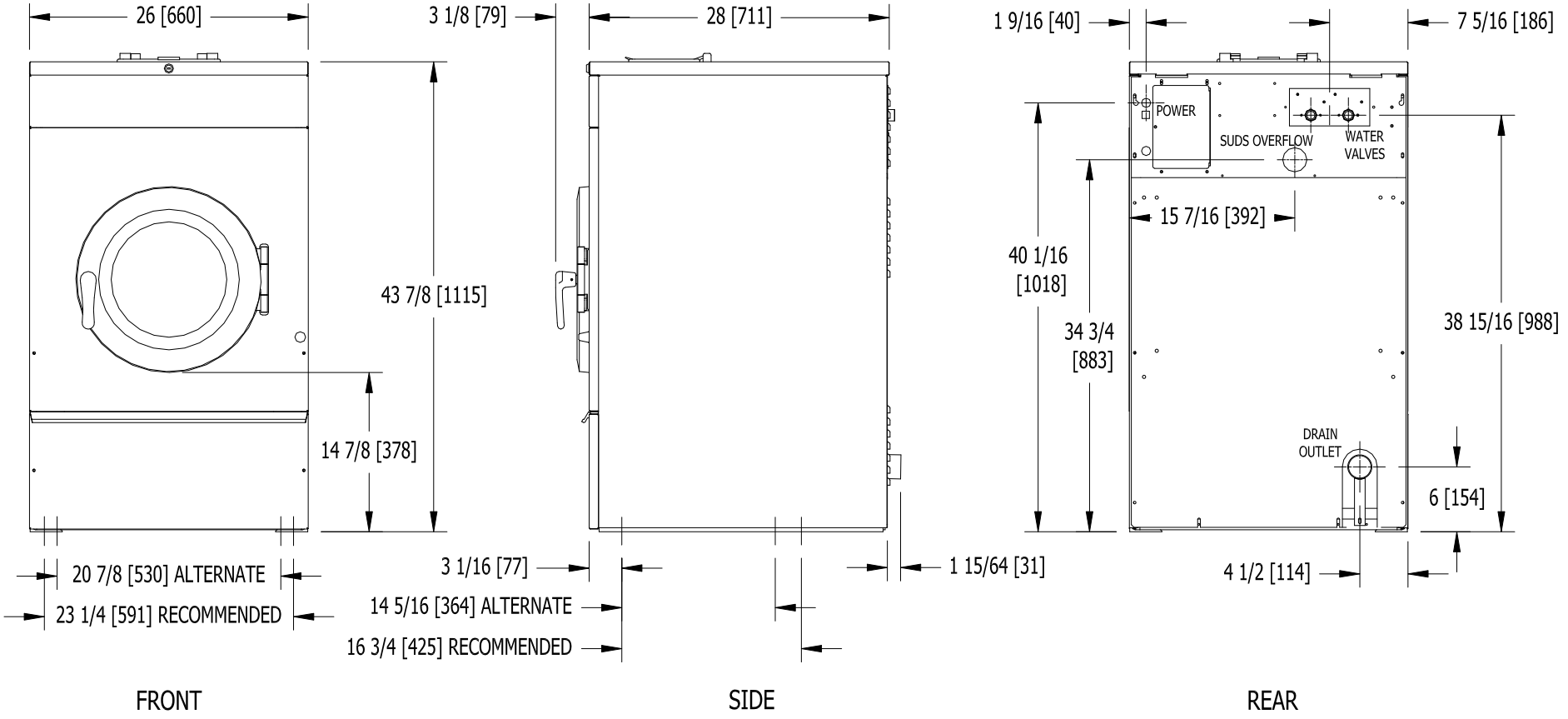
2.7.1 T-350 Machine Mounting Detail



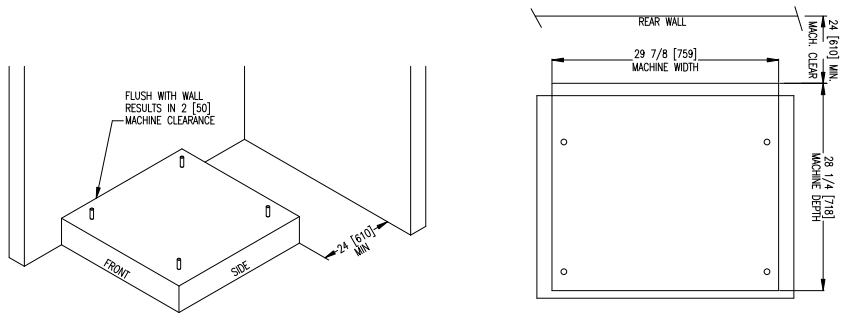
SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

2.7.2 T-350 Machine Side By Side Mounting Detail

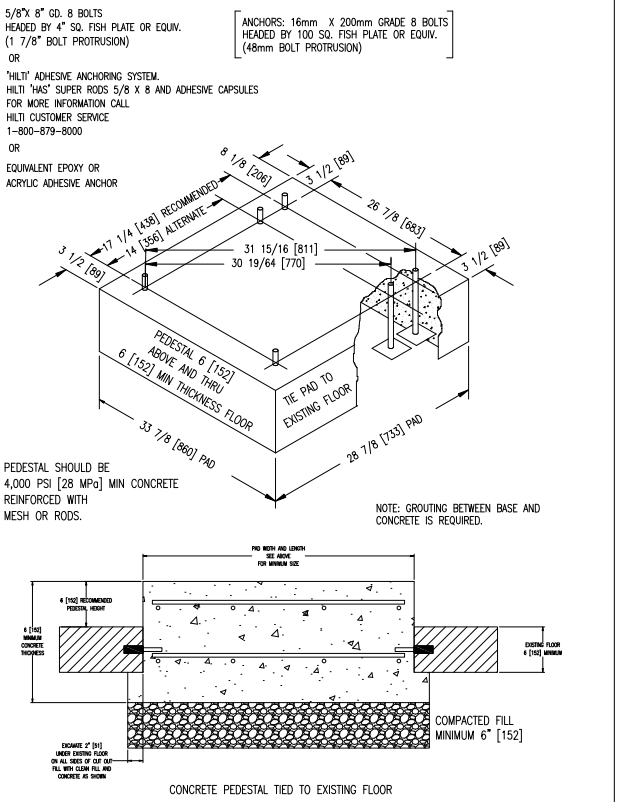
T-350 INDUSTRIAL WASHER
MOUNTING DIMENSIONS



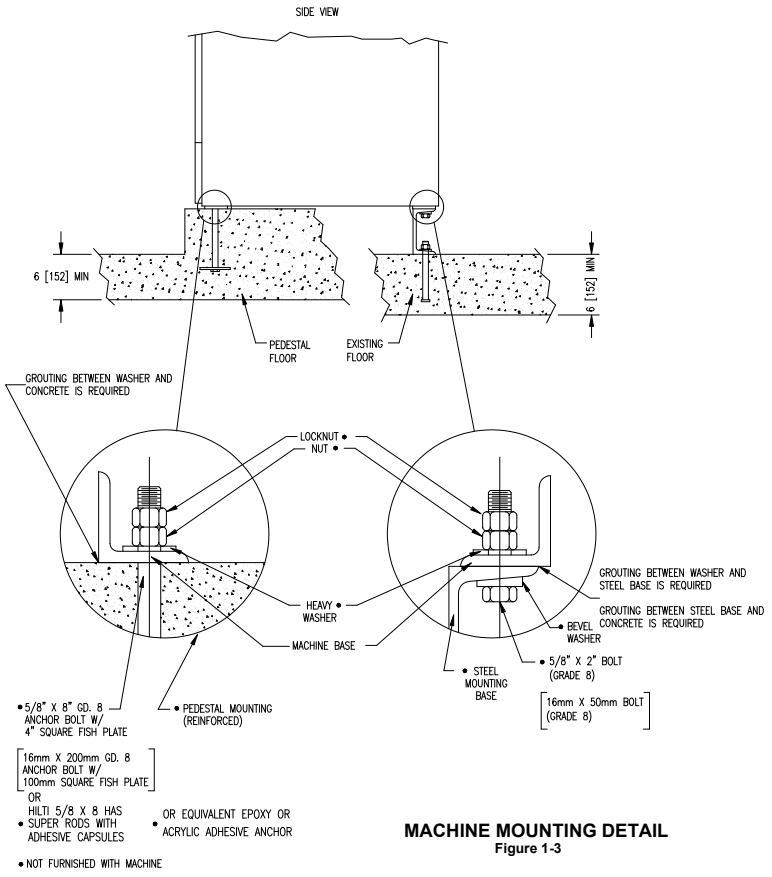
2.7.3 T-350 Industrial Washer Dimensions



FLOOR OUTLINE
Figure 1-2

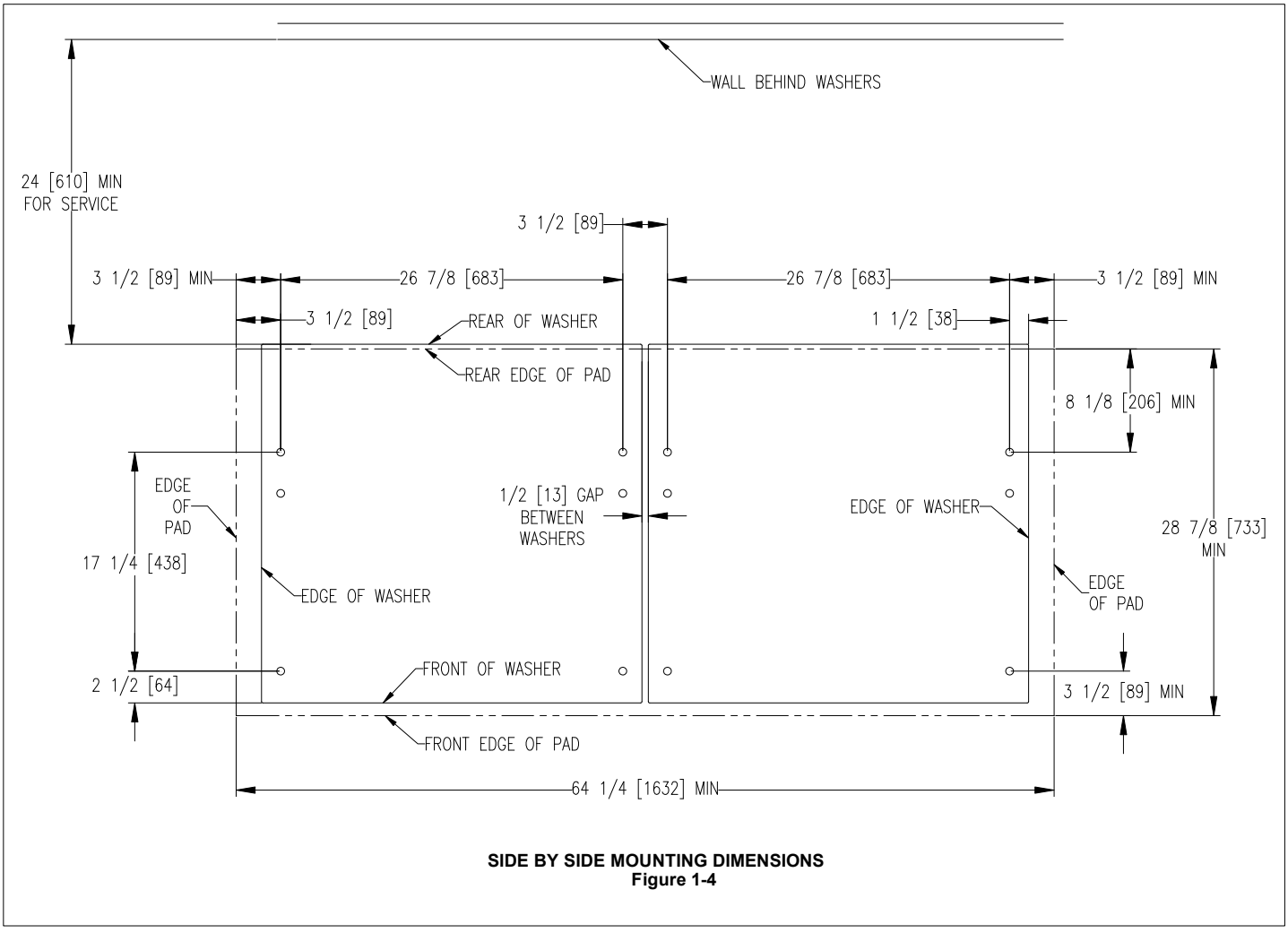


RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



MACHINE MOUNTING DETAIL
Figure 1-3

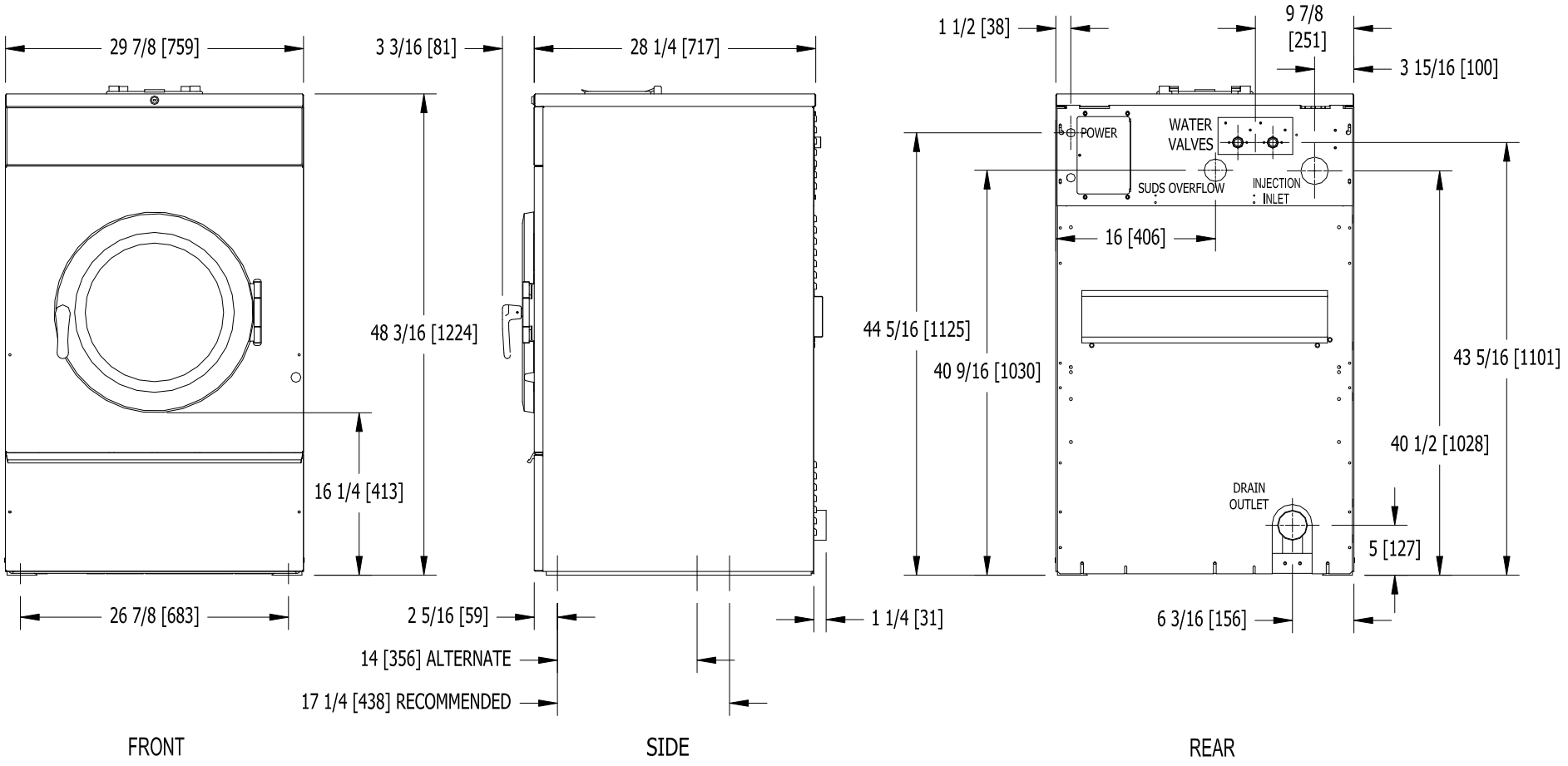
2.7.4 T-450 Machine Mounting Detail



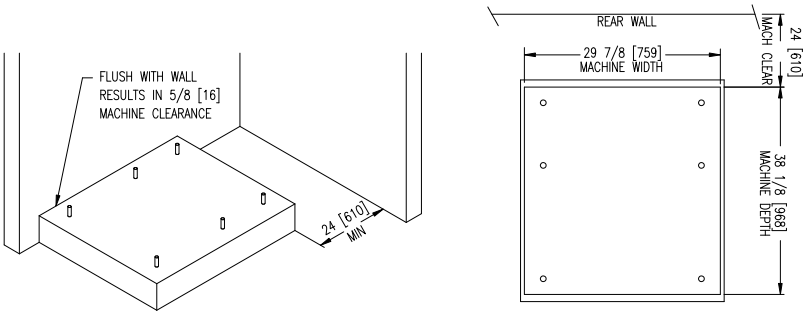
SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

2.7.5 T-450 Machine Side by Side Mounting Detail

T-450 INDUSTRIAL WASHER
MOUNTING DIMENSIONS



2.7.6 T-450 Industrial Washer Dimensions



FLOOR OUTLINE
Figure 1-2

3/4"X 8" GD. 8 BOLTS
HEADED BY 4" SQ. FISH PLATE OR EQUIV.
(2 1/2" BOLT PROTRUSION)

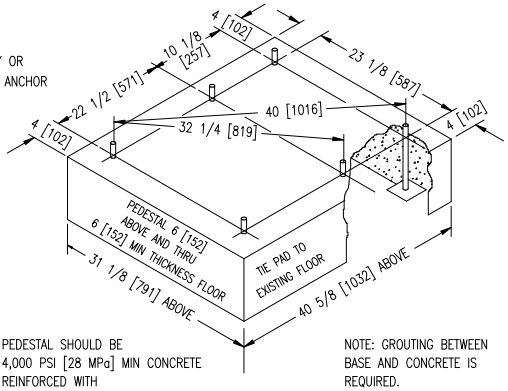
OR

'HILTI' ADHESIVE ANCHORING SYSTEM.
HILTI 'HAS' SUPER RODS 3/4 X 10 AND ADHESIVE CAPSULES
FOR MORE INFORMATION CALL
HILTI CUSTOMER SERVICE
1-800-879-8000

OR

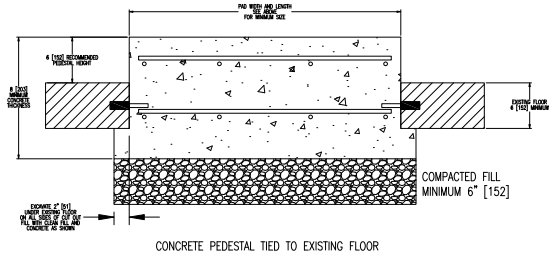
EQUIVALENT EPOXY OR
ACRYLIC ADHESIVE ANCHOR

[19mm X 200mm GD. 8 BOLTS
HEADED BY 100mm SQ. FISH PLATE
OR EQUIV.
(64mm BOLT PROTRUSION)]



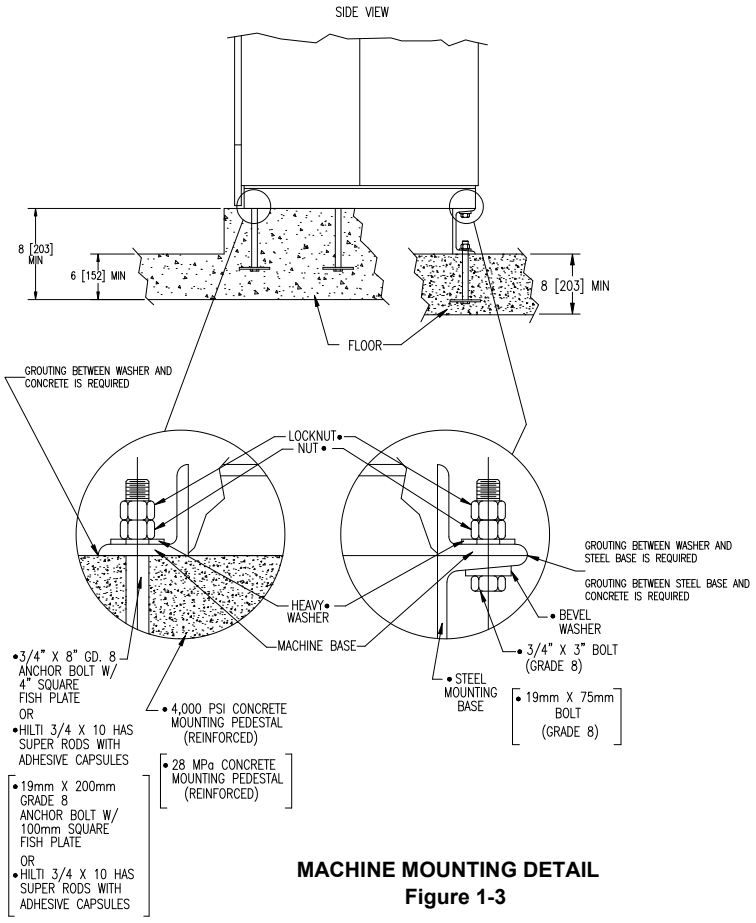
PEDESTAL SHOULD BE
4,000 PSI [28 MPa] MIN CONCRETE
REINFORCED WITH
MESH OR RODS.

NOTE: GROUTING BETWEEN
BASE AND CONCRETE IS
REQUIRED.



CONCRETE PEDESTAL TIED TO EXISTING FLOOR

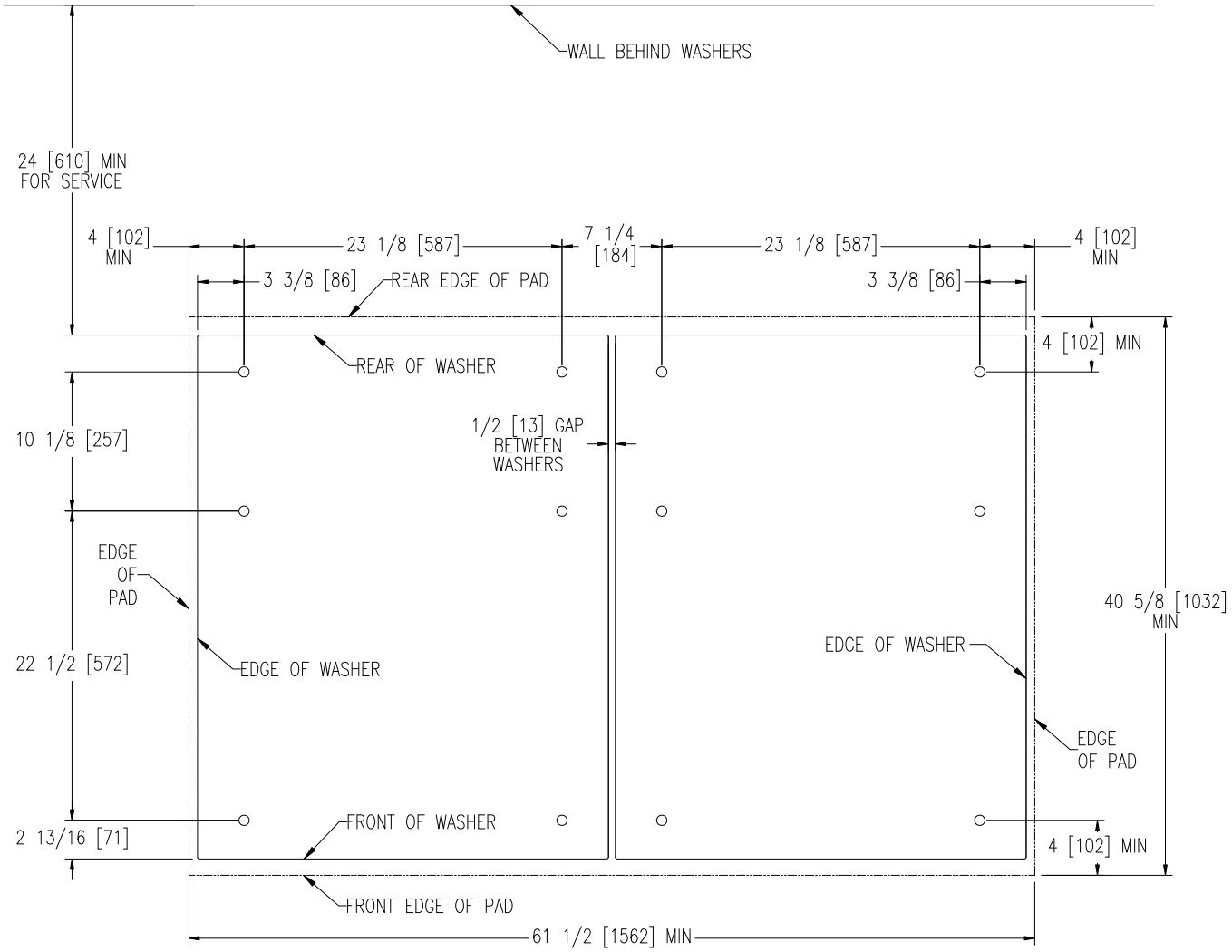
RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



MACHINE MOUNTING DETAIL
Figure 1-3

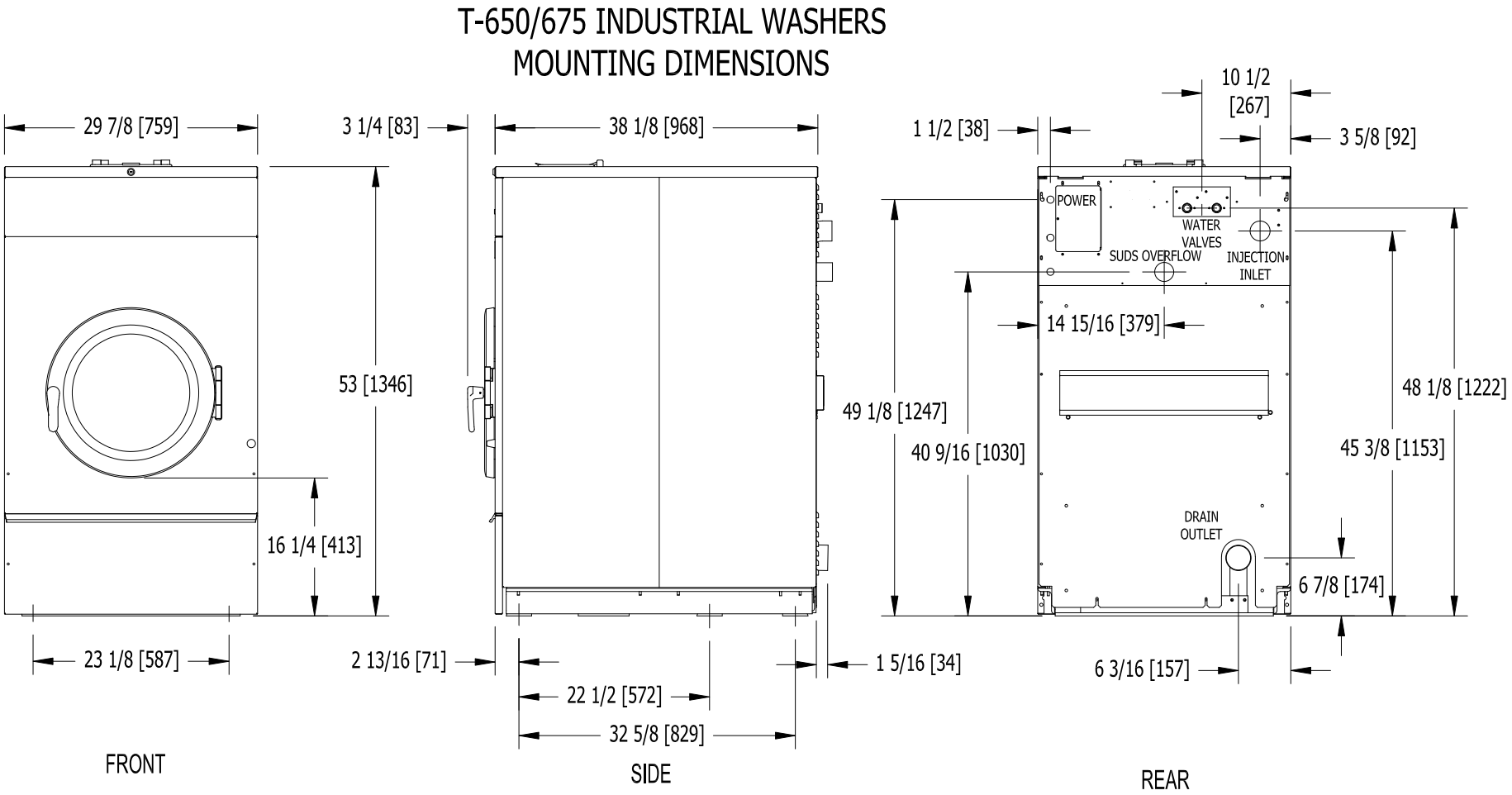
- OR EQUIVALENT EPOXY OR ACRYLIC ADHESIVE ANCHOR
- NOT FURNISHED WITH MACHINE

2.7.7 T-650/675 Machine Mounting Detail

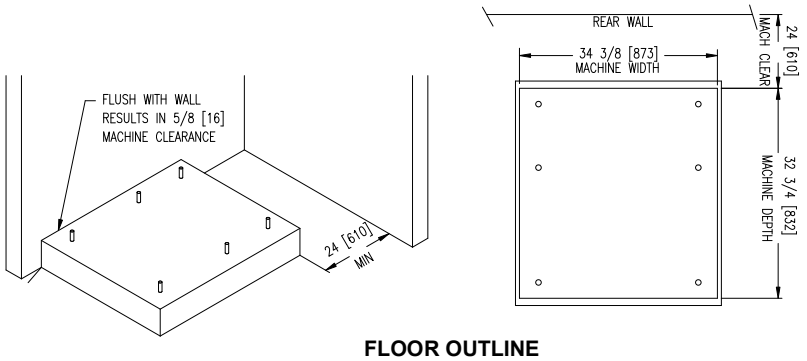


SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

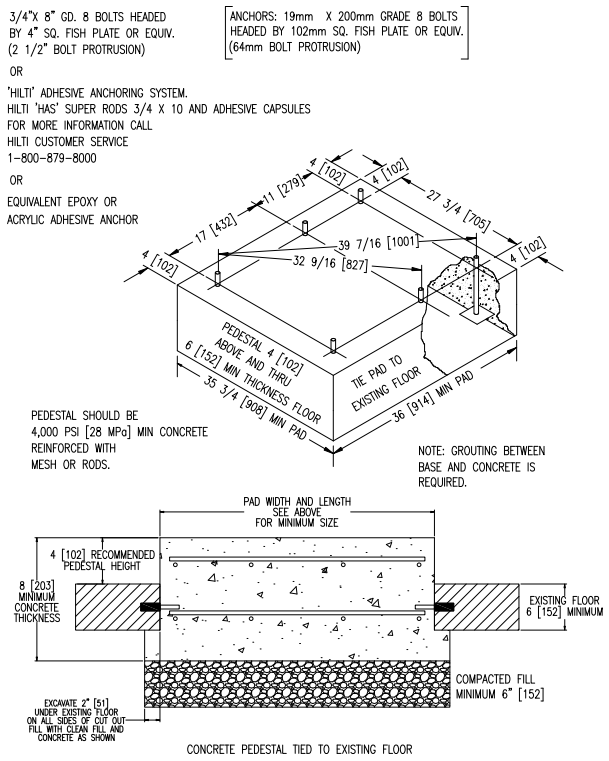
2.7.8 T-650/675 Machine Side By Side Mounting Detail



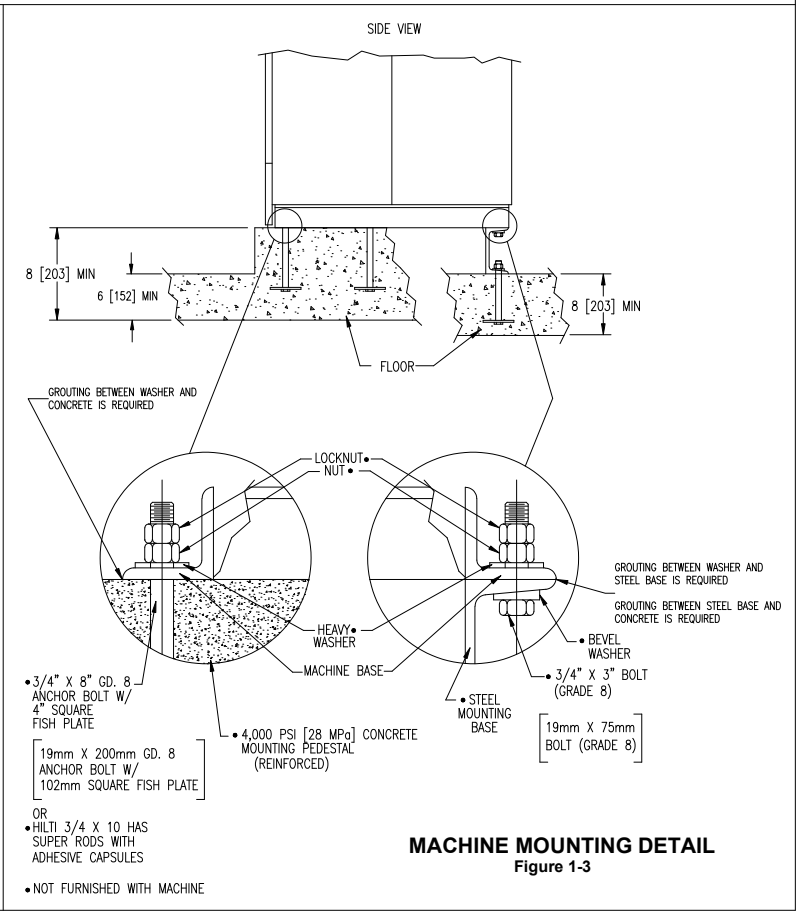
2.7.9 T-650/675 Industrial Washer Dimensions



FLOOR OUTLINE
Figure 1-2

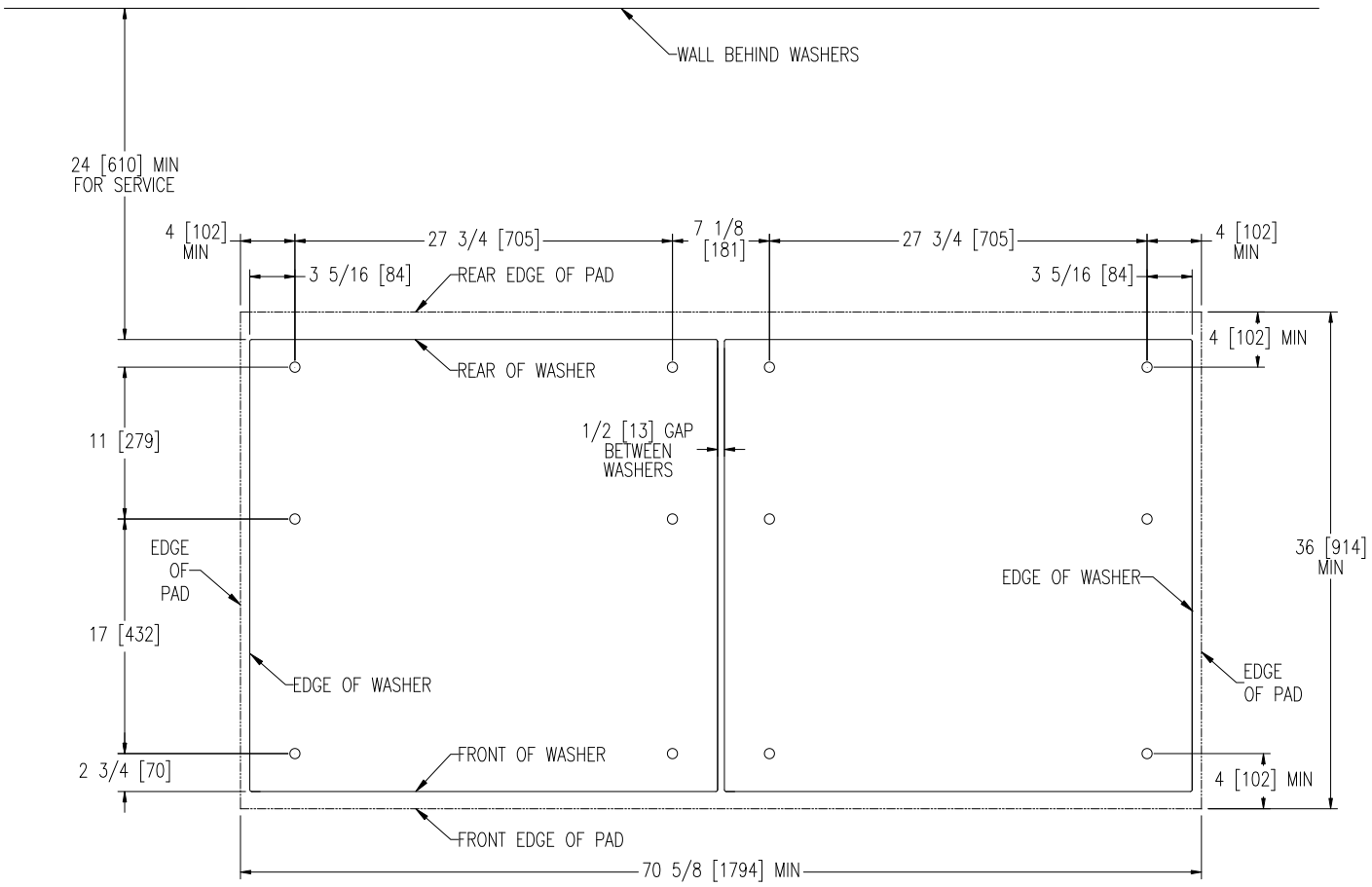


RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



MACHINE MOUNTING DETAIL
Figure 1-3

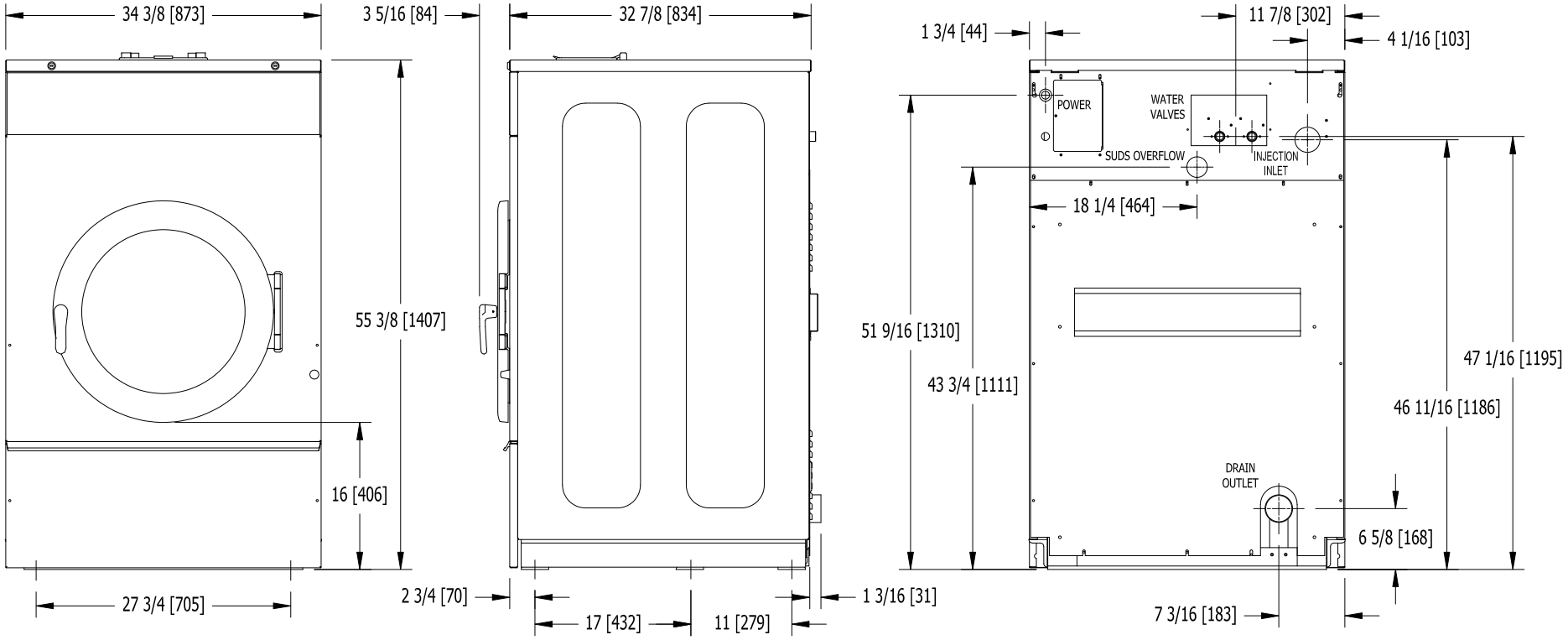
2.7.10 T-750 Machine Mounting Detail



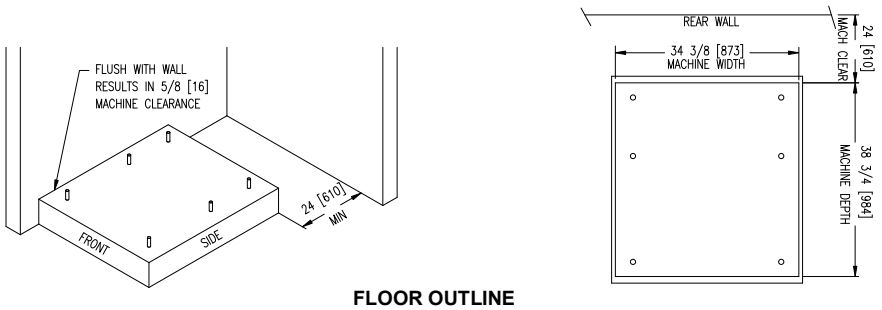
SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

2.7.11 T-750 Machine Side By Side Mounting Detail

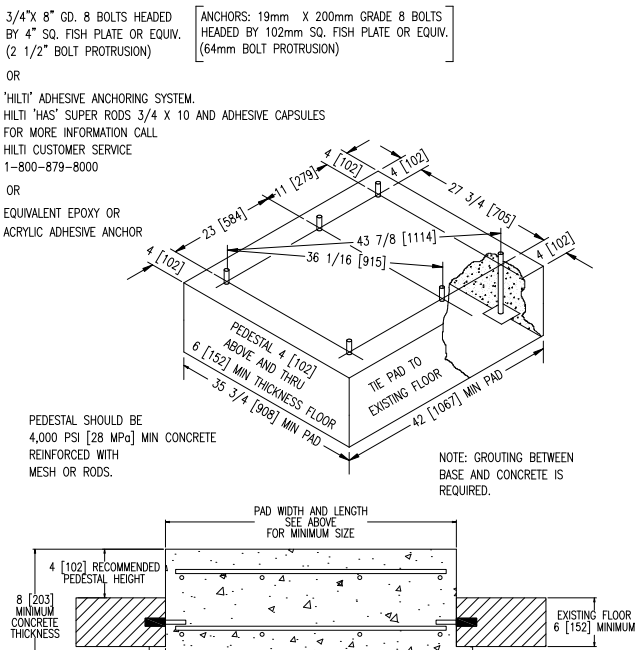
T-750 INDUSTRIAL WASHER
MOUNTING DIMENSIONS



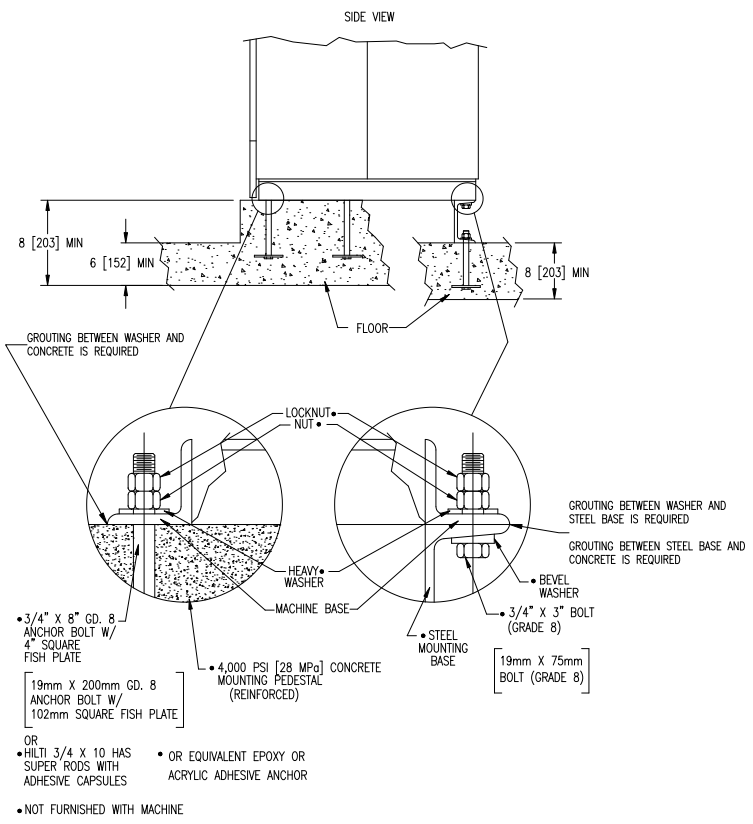
2.7.12 T-750 Industrial Washer Dimensions



FLOOR OUTLINE
Figure 1-2

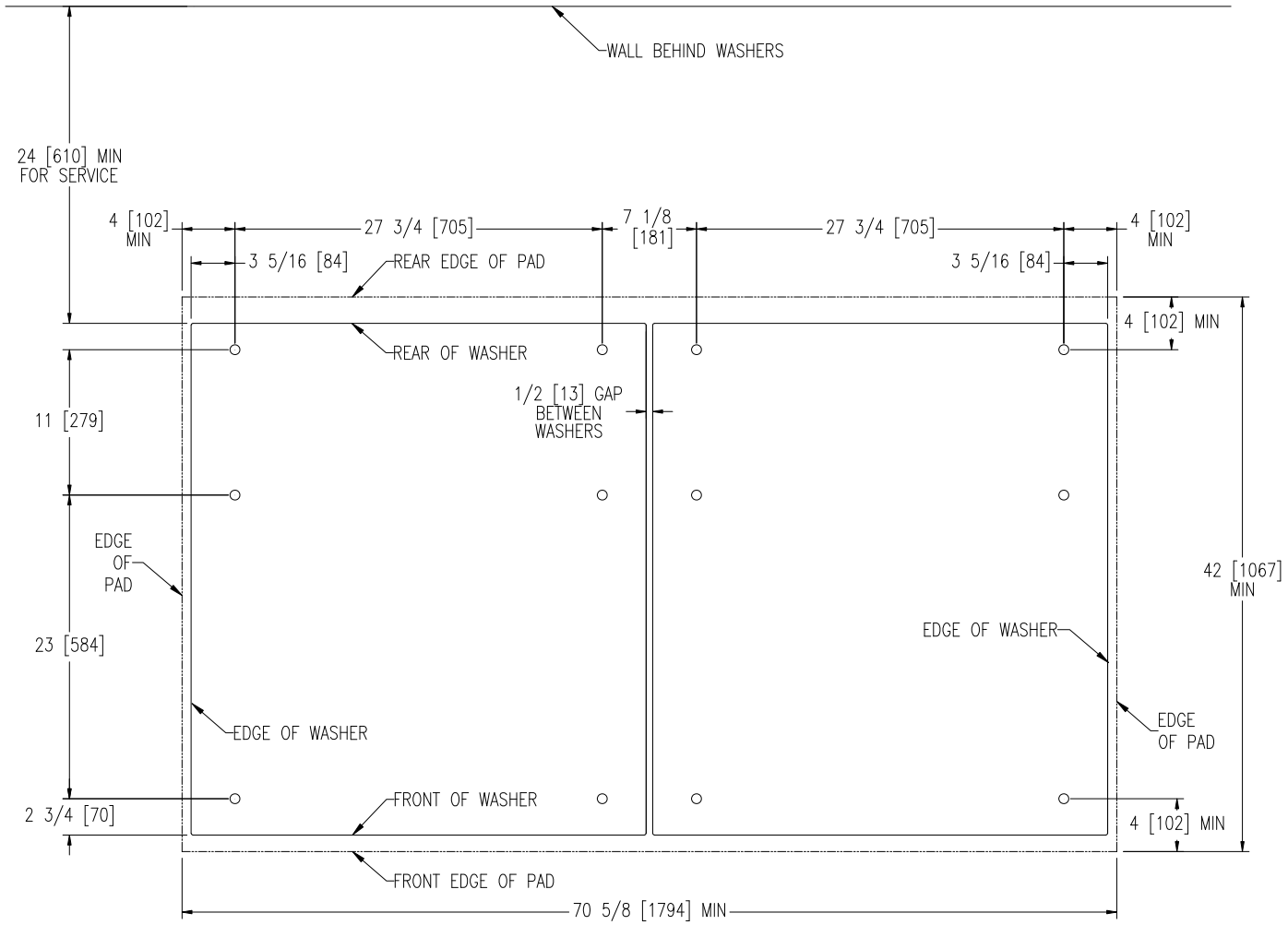


RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



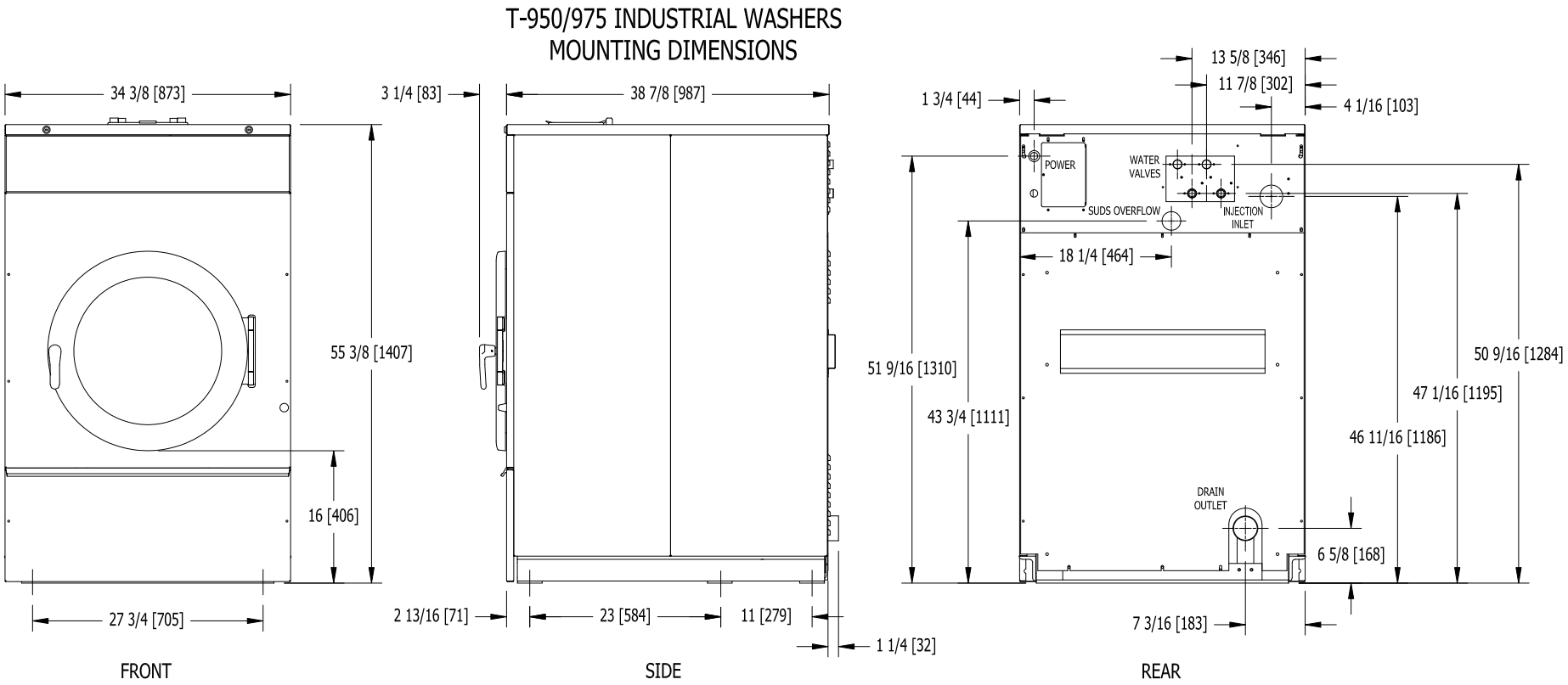
MACHINE MOUNTING DETAIL
Figure 1-3

2.7.13 T-950/975 Machine Mounting Detail

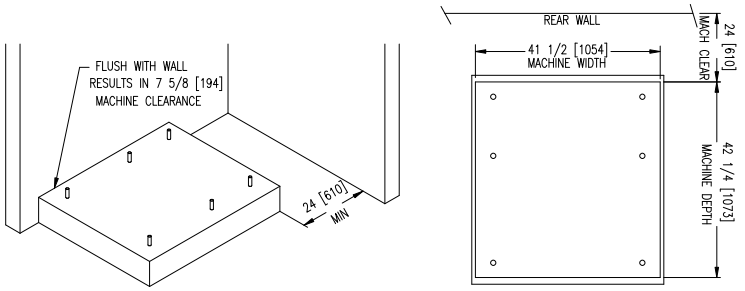


SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

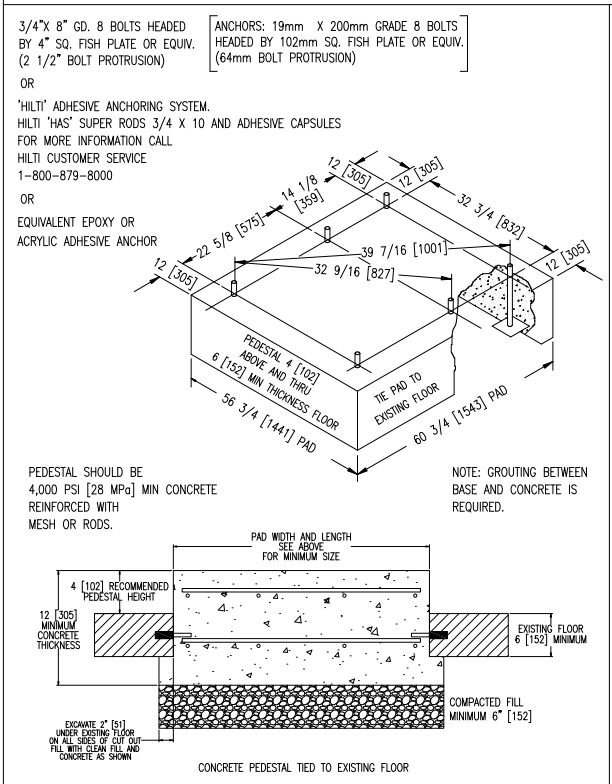
2.7.14 T-950/975 Machine Side By Side Mounting Detail



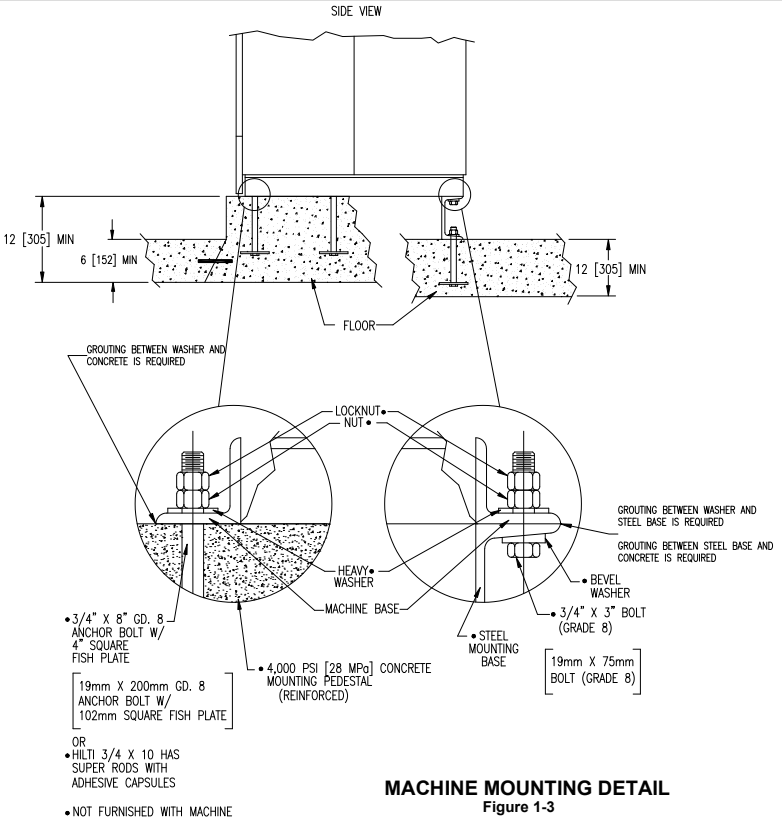
2.7.15 T-950/975 Industrial Washer Dimensions



FLOOR OUTLINE
Figure 1-2

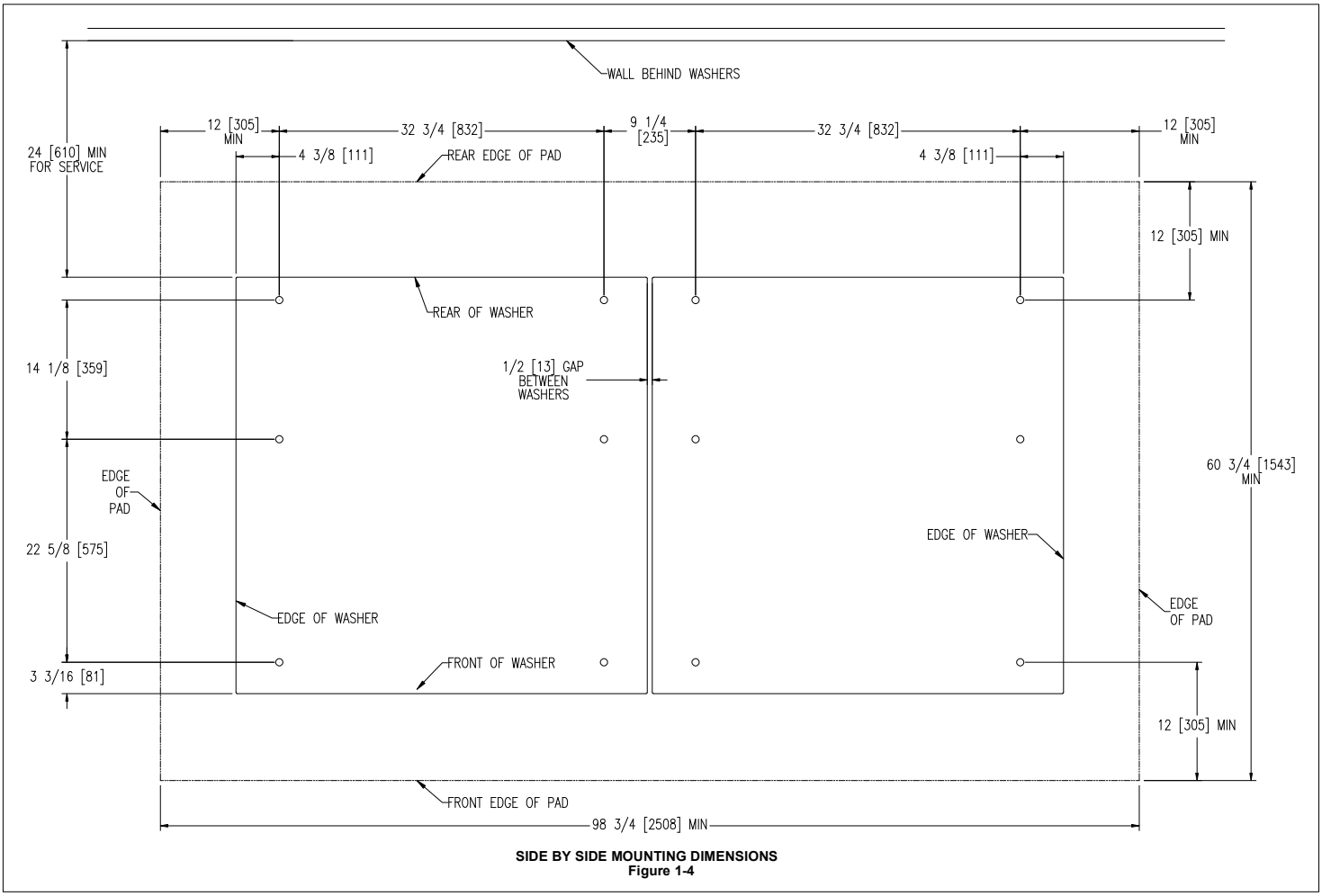


RAISED CONCRETE PEDESTAL MOUNTING OPTION
Figure 1-1



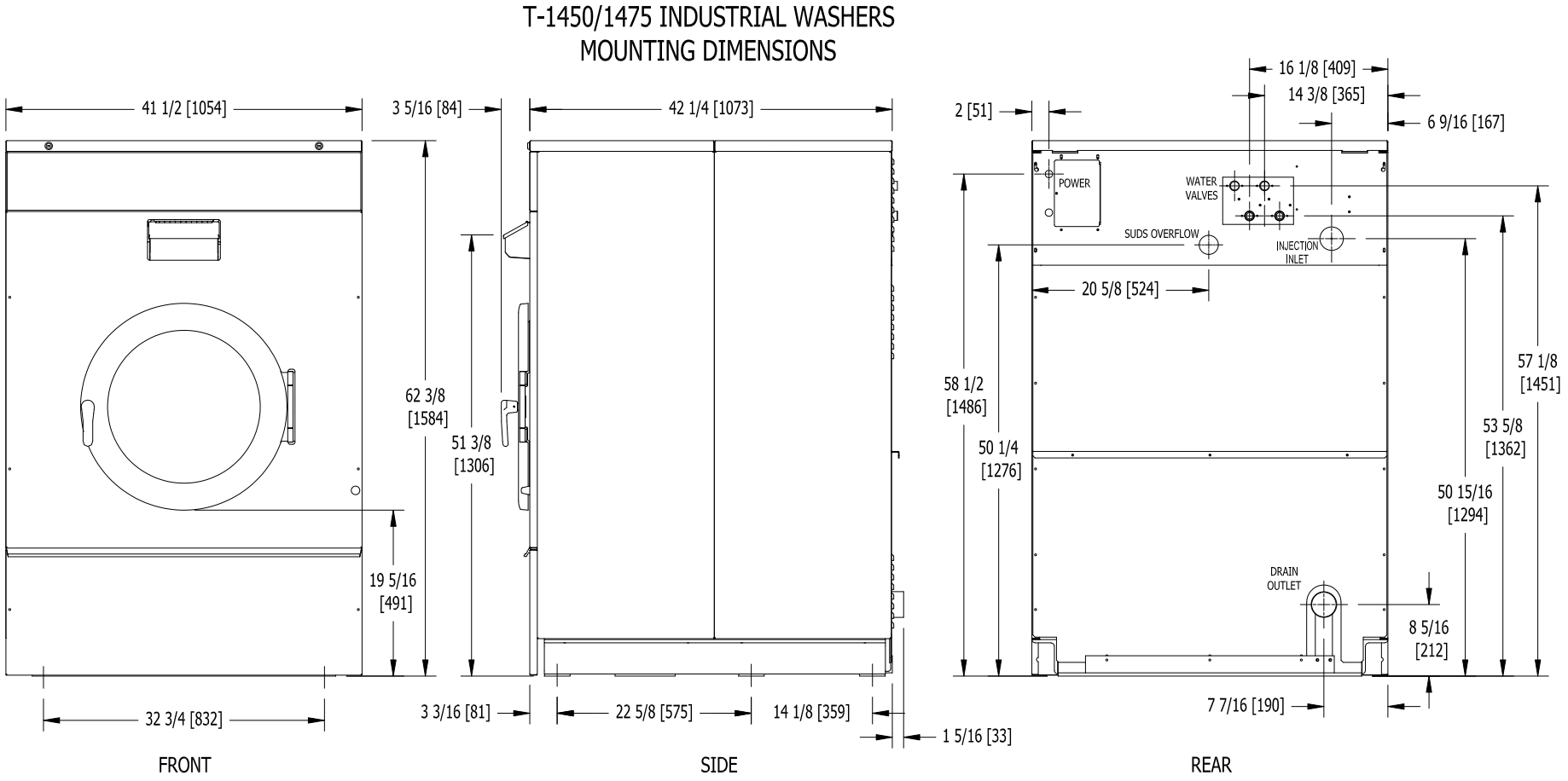
MACHINE MOUNTING DETAIL
Figure 1-3

2.7.16 T-1450/1475 Machine Mounting Detail



SIDE BY SIDE MOUNTING DIMENSIONS
Figure 1-4

2.7.17 T-1450/1475 Machine Side By Side Mounting Detail



2.7.18 T-1450/1475 Industrial Washer Dimensions

2.8 PLUMBING

Water supply hoses are provided with each machine. The threaded connections on the hoses are ¾-11 ½ NHT for 60 Hz models and ¾-14 BSP for 50 Hz models.

Separate hot and cold water lines must be supplied to the machine, maintaining 30 psi to 120 psi (207 kPa to 827 kPa) water flow pressure. A 140°F (60°C) hot water supply is recommended for best washing results. Do not exceed 180°F (82°C) water temperature.

2.9 DRAIN

The drain outlet tube size:

For T-350 is 2 ¼ inches (57 mm) in diameter,
and for T-450, 650, 675, 750, 950, 975, 1450 and 1475 is 3 inches (76 mm) in diameter

Any drain hose used must be lower than the drain valve to assure proper draining.

2.10 PROTECTIVE FILM

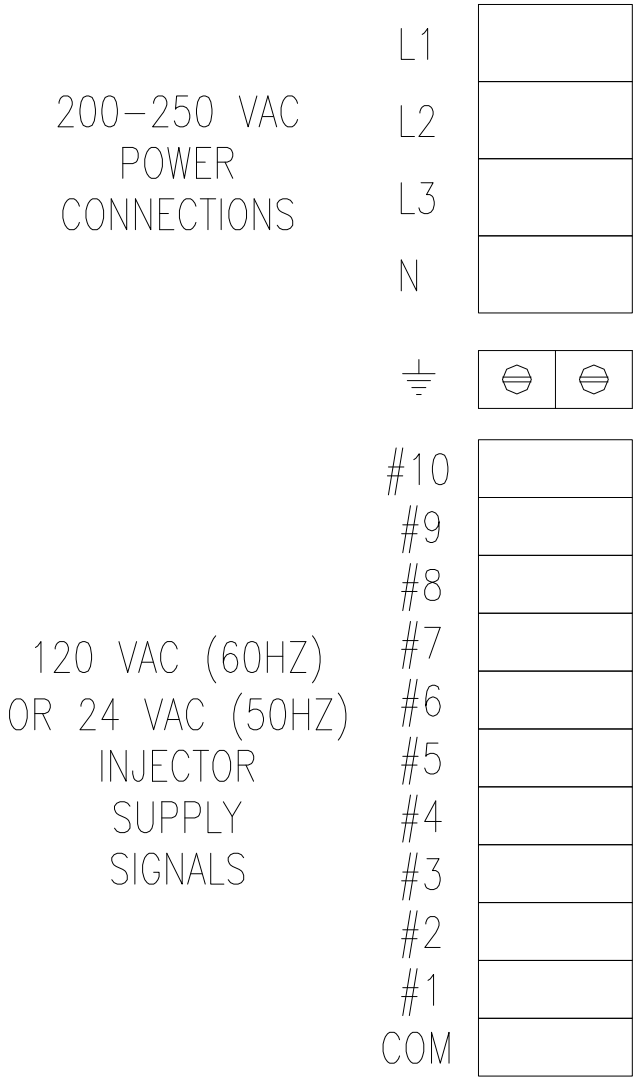
The machine may have protective adhesive film on the front control panel label area and on the front, top, and side stainless steel panels. The film may be peeled off before putting the machine into service.

2.11 ELECTRICAL

The Dexter single/three-phase 208-240VAC 60 Hz (single phase 230VAC 50 Hz) non-heated washing machines and three phase only 208-240VAC 60 Hz (400VAC 50 Hz) heated washing machines are intended to be permanently installed appliances. No power cord is provided. The machine should be connected to an individual branch circuit not shared by lighting or other equipment. A means for disconnection with a contact separation of at least 1/8" (3 mm) must be provided. The connection should be sheathed in liquid-tight or approved flexible conduit, or equivalent, with conductors of the proper size and insulation (50 Hz: The sheath of the supply cord must be at least equivalent to that of a cord complying with IEC 227 or IEC 245). A qualified technician should make such connections in accordance with the wiring diagram. See specification sheet for minimum recommended wire size.

Individual circuit breakers for each unit are required. Do not use ground-fault (earth-fault) circuit breakers or ground-fault (earth-fault) circuit interrupter outlets.

<u>WARNING</u>:
SHUT OFF POWER AND WATER BEFORE OPENING ANY SERVICE PANELS.



ELECTRICAL CONNECTIONS

2.11.1 INSTALLING THE ELECTRICAL CONNECTION

2.11.1.1 Disconnect all power to the washer.

2.11.1.2 Remove the top panel of the washer and locate the power terminal block near the back of the control compartment.

2.11.1.3 If power is 208-240V-**3PH**-60Hz, connect L1, L2, L3 and Ground. If there is a high leg, it must NOT be connected to L1 or L2. However, failure due to a voltage surge on the high leg is not covered by equipment warranty. Contact Dexter Laundry with any questions.

2.11.1.4 If power is 208-240V-**1PH**-60Hz, connect L1, L2 and Ground (Only Non-Heated Washers may be connected to 1PH power).

2.11.1.5 If power is 400V-**3PH**-50Hz, connect L1, L2, L3, N, and Earth. If there is a high leg, it must NOT be connected to L1 or L2. However, failure due to a voltage surge on the high leg is not covered by equipment warranty. Contact Dexter Laundry with any questions. (Only Heated Washers may be connected to 400V-3PH power).

2.11.1.6 If power is 230V-**1PH**-50Hz, connect L1, N and Earth (Only Non-Heated Washers may be connected to 1PH power).

NOTE: It is important that the grounding screw next to the power terminal block be connected to a good external ground.

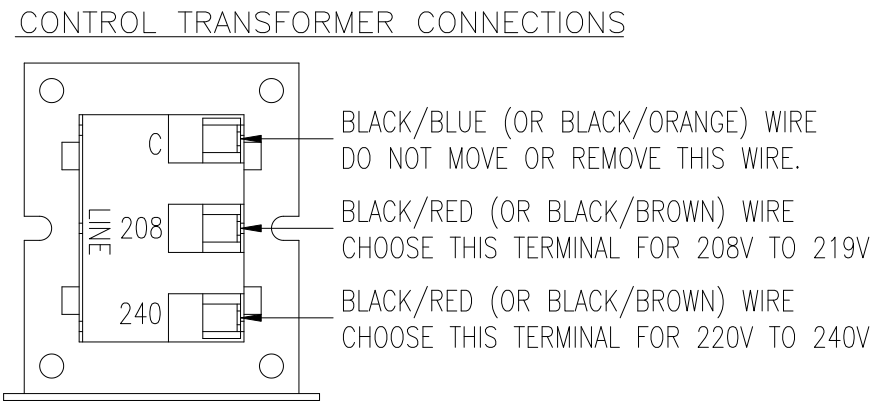
2.11.2 FUSING REQUIREMENTS

Single- and Three -phase models:

See specification sheet for required TIME-DELAY (DUAL ELEMENT) FUSE size (or equivalent circuit breaker)

2.11.3 CONTROLS TRANSFORMER (208-240V 60 Hz models only)

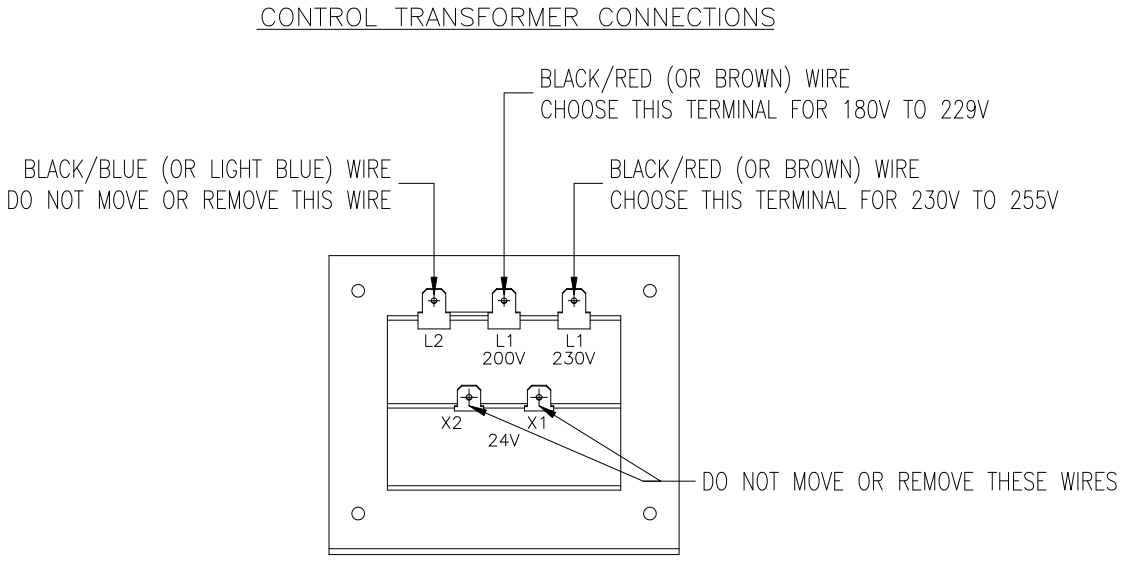
The controls transformer is located inside the control trough and steps a range of 208 to 240 volts down to 115 volts and 24 volts. There are two terminals on the controls transformer for the primary (incoming) power. Use the terminal marked "208V" for power supplies between 208 and 219 volts. Use the terminal marked "240V" for power supplies between 220 and 240 volts. Refer to the following for control transformer connections.



60 Hz Control Transformer Connections

2.11.4 CONTROLS TRANSFORMER (230V 50 Hz models only)

The controls transformer is located inside the control trough and steps a range of 180 to 255 volts down to 24 volts. There are two terminals on the controls transformer for the primary (incoming) power. Use the terminal marked "L1 200V" for power supplies between 180 and 229 volts. Use the terminal marked "L1 230V" for power supplies between 230 and 255 volts.

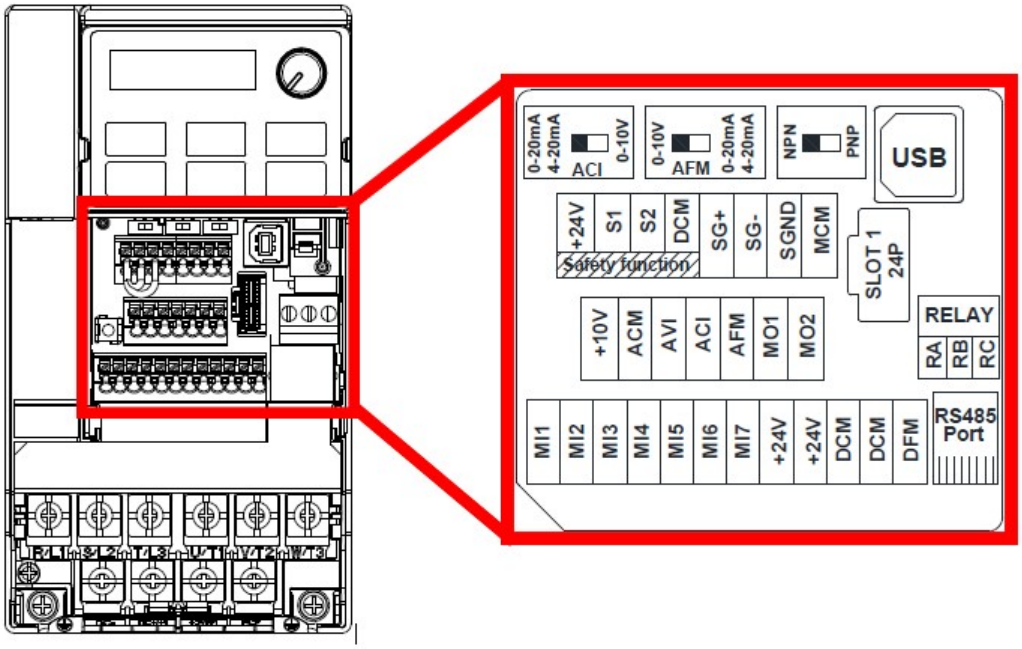


50 Hz Control Transformer Connections

2.11.5 VARIABLE FREQUENCY DRIVE ADJUSTMENTS (208-240V 60 Hz T-950, T-675 and T-1475 models only)

The variable frequency drive allows for varying acceleration during Final Spin on T-950, T-675 and T-1475 models. It is important to utilize a decreased acceleration rate when the application power is low. This acceleration rate is determined by a white wire jumper installed on the drive terminal block from +10V to AVI. Reference the diagram below for terminal block locations.

Remove the wire jumper when input power is between 208 and 219 volts. Keep the jumper installed when input power is between 220 and 240 volts. Reference the drawings below for the jumper location.



Control Terminations on Variable Frequency Drive

O Series Washer Model	Max Spin Speed	Input Voltage	Jumper Terminal Locations on Variable Frequency Drive (VFD)													
			MI1	MI2	MI3	MI4	MI5	MI6	DCM (Left)	DCM (Right)	24V	ACM	AVI	ACI	10V	M01
T-950	200G	240V											X		X	
	200G	208V	No Jumper required													
T-675	300G	240V											X		X	
	300G	208V	No Jumper required													
T-1475	300G	240V											X		X	
	300G	208V	No Jumper required													

2.12 INJECTION SOURCE CONNECTIONS

The washer control may be programmed to send ten 120VAC output signals for 60Hz models (or 24VAC for 50Hz) for a chemical injection system. The signals are not intended as a power source and must be limited to less than 100 milliamps of current. There is a separate terminal block for connection of the external injection signals. For the injection sources, program codes 1 through 10 and their respective terminal block connections are as shown in the table below.

Dexter Recommended Connections	Controller / Injector Signals
Detergent	1
Bleach	2
Starch	3
Sour/Softener	4
	5
	6
	7
	8
	9
	10

Injection Signal and Circuit Identification

If required, chemical injection hoses are to be inserted into the injection inlet at the upper right rear of the washer. These hoses should be inserted into the round PVC pipe a distance of:

For T-450 minimum of 8" (20 cm) and a maximum of 12" (30 cm)

For T-650, 675, 750, 950, 975, 1450 and 1475 a minimum of 14" (36 cm) and a maximum of 18" (46 cm)

(For T-350 insert hoses into the top soap dish)

This will eliminate chemical buildup in the pipe and/or restrict water flow to the tub. Secure the hoses as required.

2.13 OPERATION CHECK

After all mounting, plumbing and electrical work is completed, select any desired wash cycle and run the machine through a complete wash cycle. Check for water leaks and verify proper operation.

During intermediate spin and final spin, the cylinder should turn in a **counterclockwise** direction when viewed from the front of the machine. If spin is clockwise, the T1 and T2 motor wires connecting to terminal T1 and T2 on the variable frequency drive should be swapped. Remove power to the machine before opening service panels and swapping wires.

2.14 INSTALLATION SWITCH CHECK (T-675, T-975 AND T-1475 ONLY)

After the washer is properly installed, the installation switch should be checked for functionality.

The switch (green) is located on the back side of the washer base.

DO NOT bypass the installation switch.

Start a wash cycle, then carefully place a magnet on top of the switch. The magnet should open the normally closed ball switch. When the switch opens, the cycle should stop, the drain valve will open, and the display will show a message that the switch has been tripped.

To reset the washer, remove the magnet and follow the instructions on the display to reset the switch.

To avoid nuisance tripping of the switch, the washer needs to be level, properly grouted and properly anchored.

3 OPERATING INSTRUCTIONS

3.1 STARTING THE WASHER

3.1.1 Turn on power to the washer.

3.1.2 Load the laundry.

Place laundry into the cylinder and latch the door securely. Be sure laundry does not get caught between the door gasket and tub front when closing the door. Maximum load is the dry weight capacity listed in the specification sheet. Do not exceed the listed capacity weight.

NOTE: To begin closing the door, the handle must be in the horizontal position. After moving the door to the closed position, the handle must be turned down to the vertical position in order to latch the door for machine operation.

3.1.3 Select wash cycle.

Select the appropriate cycle for the type of load being washed. Use the "UP" and "DOWN" keys to change the cycle on the display to the desired cycle and press the enter button to select.

3.1.4 Add washing chemicals.

If not using a chemical injection system, add low sudsing powdered detergent into the "DETERGENT" compartment of the automatic dispenser on the top or front of the washer.

If liquid wash products are used in the "DETERGENT" compartment, they must be added at the beginning of the wash cycle.

If desired, add fabric softener to the "FABRIC SOFTENER" compartment. Use the amount of fabric softener as recommended by the manufacturer.

If the machine is set for pre-wash, washing products can be added to the round opening of the dispenser or put in with the clothes when loading the washing machine.

If bleach is desired, DO NOT place into dispenser until the ADD BLEACH message is displayed.

3.1.5 Start wash cycle.

Press enter to start the cycle. The display will show cycle information throughout the cycle. The door will lock and remain locked until the end of the cycle.

3.1.6 Pause wash cycle / End wash cycle

Press the red pause button to pause the cycle. Select Start to restart the cycle or select Cancel Cycle to end the wash cycle.

3.2 END OF CYCLE

A tone will sound (if programmed) and the display will indicate that the cycle has ended. The door can now be opened. Immediately remove contents of washer. Leave the door open when the machine is not in use.

3.3 EMERGENCY STOP / SAFETY DOOR LOCK

This machine is equipped with a safety door lock that locks the door when the cycle is started until the cycle is complete. The door lock prevents opening the door for up to 3 minutes if the power is interrupted during the cycle.

The Emergency Stop button ends the cycle and allows the door to be opened after the Safety Door Lock releases. When the Emergency Stop button is pressed an alarm will sound (if programmed), an "Emergency Stop" message will be displayed, tumbler movement will begin to slow and water will begin draining from inside the washer. Though the machine may end movement quickly, it may take up to 3 minutes for the door to unlock. During that time the alarm will continue to sound. When the alarm stops, the door may be opened. Inspect the washer as needed and reset the emergency stop button by turning it clockwise. Reset the washer by selecting Cancel. The washer may be restarted by closing and latching the door, and starting a new cycle.

3.4 VARIABLE FREQUENCY DRIVE INDICATORS

There are three small colored LEDs located on the upper region of the Variable Frequency Drive (VFD). They are labeled as "READY", "RUN", and "FAULT" and can be used for troubleshooting. The definitions of the LEDs are listed in the table below.

LED Status	Washer Condition
Steady Yellow	Tumbling
Blinking Yellow	Stop from Tumble
Steady Yellow	Ramp to Intermediate or Final Extract Spin
Steady Yellow	Spinning (Intermediate or Final)
Blinking Yellow	Stop from Spin (Intermediate or Final)
Steady Green	Idle Mode (No Cylinder Movement)
Steady Red	VFD fault
Blinking Red	VFD warning

Variable Frequency Drive Indicators

4 MACHINE PROGRAMMING INSTRUCTIONS

4.1 ENTER PROGRAMMING MODE

4.1.1 In the cycle selection screen, scroll to Management View at the beginning of the cycle list and select enter.

4.1.2 Enter Passcode and confirm by pressing enter.

4.1.3 Select desired option.

4.1.3.1 Example EDIT CYCLES

Cycles may be edited in the Edit Cycles selection. Within Edit Cycles, cycles may be edited, copied, reordered or deleted.

After making edits, select Back/Exit until out of the option. Confirm changes when prompted to do so. When finished, select Back/Exit until you have returned to the cycle selection screen.

4.2 WATER LEVEL ADJUSTMENT

The water level of all baths can be adjusted by changing the switch settings on the electronic pressure sensor. On-premise washers are shipped with the pressure sensor harness connected to Switch #1 for "LO" level and Switch #2 for "HI" level.

Water level adjustments can also be made in 1/4" (6 mm) increments by adjusting the switch positions for the desired level. It is not recommended for the water level to be set above the factory Switch #2 settings. Refer to the following chart for the switch settings and the factory default settings:

DEXTER. LAUNDRY

Water Level Chart

Switch Positions:

Depth - inches (mm)		Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Pos 6
5.00	(127)	off	off	off	off	off	off
5.25	(133)	on	off	off	off	off	off
5.50	(140)	off	on	off	off	off	off
5.75	(146)	on	on	off	off	off	off
6.00	(152)	off	off	on	off	off	off
6.25	(159)	on	off	on	off	off	off
6.50	(165)	off	on	on	off	off	off
6.75	(171)	on	on	on	off	off	off
7.00	(178)	off	off	off	on	off	off
7.25	(184)	on	off	off	on	off	off
7.50	(191)	off	on	off	on	off	off
7.75	(197)	on	on	off	on	off	off
8.00	(203)	off	off	on	on	off	off
8.25	(210)	on	off	on	on	off	off
8.50	(216)	off	on	on	on	off	off
8.75	(222)	on	on	on	on	off	off
9.00	(229)	off	off	off	off	on	off
9.25	(235)	on	off	off	off	on	off
9.50	(241)	off	on	off	off	on	off
9.75	(248)	on	on	off	off	on	off
10.00	(254)	off	off	on	off	on	off
10.25	(260)	on	off	on	off	on	off
10.50	(267)	off	on	on	off	on	off
10.75	(273)	on	on	on	off	on	off
11.00	(279)	off	off	off	on	on	off
11.25	(286)	on	off	off	on	on	off
11.50	(292)	off	on	off	on	on	off
11.75	(298)	on	on	off	on	on	off
12.00	(305)	off	off	on	on	on	off
12.25	(311)	on	off	on	on	on	off
12.50	(318)	off	on	on	on	on	off
12.75	(324)	on	on	on	on	on	off
13.00	(330)	off	off	off	off	off	on
13.25	(337)	on	off	off	off	off	on
13.50	(343)	off	on	off	off	off	on
13.75	(349)	on	on	off	off	off	on
14.00	(356)	off	off	on	off	off	on
14.25	(362)	on	off	on	off	off	on
14.50	(368)	off	on	on	off	off	on
14.75	(375)	on	on	on	off	off	on
15.00	(381)	off	off	off	on	off	on

Factory Settings:

Model	On-Premise			
	Switch #1 Low Level inches (mm)		Switch #2 High Level inches (mm)	
T-350	6.00	(152)	6.75	(171)
T-450	6.00	(152)	8.50	(216)
T-650/675	8.00	(203)	11.00	(279)
T-750	6.00	(152)	8.75	(222)
T-950/975	6.00	(152)	8.75	(222)
T-1450/1475	6.75	(171)	9.50	(241)

5 WASHER ERROR MESSAGES

The O-Series washer control reacts to various abnormal conditions by displaying an Error message. These messages usually contain the "Error" text, and then a general description of the message. Below is a listing of Error messages separated by each potential displayed message in bold face. Each is followed by:

- Condition that creates the displayed message on the control
- Action that the control takes responding to the condition
- Exit is the method the user (or the control) should use to bring the machine back to normal operation.

The actual displayed message on the control may contain the general description listed below and additional details (such as number or additional text). However, the condition, action or exit qualities of the error message should be the same for all variations.

OPERATION IN PROGRESS	
Condition	This error occurs when the user is attempting to start a machine operation while another operation is ending.
Action	When detected, the control does not respond to user input on the buttons. There is no delay in the action once the criteria are met. The control will finish the current operation while displaying "OPERATION IN PROGRESS". Once the operation is complete, the error will no longer be displayed and the control will respond to user input normally.
Exit	The error will be reset automatically once the current operation is complete.
POWER LOSS	
Condition	This error occurs when the Main Control Board detects a total loss of 24VAC power.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
BROWN OUT	
Condition	This error occurs when the Main Control Board detects less then 21VAC at the 24VAC input.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.

TEMP SENSOR SHORT	
Condition	This error occurs when the control detects a short circuit from the temperature sensor.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Note	This error code is disabled if the washer model does not have a temperature sensor
TEMP SENSOR OPEN	
Condition	This error occurs when the control detects an open circuit from the temperature sensor.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Note	This error code is disabled if the washer model does not have a temperature sensor
NO HEAT RISE	
Condition	This error occurs when the control detects that the temperature is not increasing.
Action	When detected there is a delay of 15 minutes before the error is active. Once active, the control will display the "NO HEAT RISE" prompt, alternating with the normal Cycle Progress screen at a rate of 5 seconds on, 5 seconds off. The heating relay will also be turned off. Otherwise the cycle will continue normally.
Exit	The Error Code will continue to be displayed until the in-progress cycle is stopped and the control is returned to Idle Mode. It will then reset automatically.
Note	This error code is disabled if the washer model does not have an Auxiliary Heating option
HEAT RISE OUT OF RANGE	
Condition	This error occurs when the control detects that the operating temperature is greater than 220 degrees F (or 104 degrees C).
Action	When detected, the control will display the "HEAT RISE OUT OF RANGE" prompt, alternating with the normal Cycle Progress screen at a rate of 5 seconds on, 5 seconds off. The heating relay will also be turned off. Otherwise the cycle will continue normally.

	There is no delay in the action once the criteria are met.
Exit	The Error Code will continue to be displayed until the in-progress cycle is stopped and the control is returned to Idle Mode. It will then reset automatically.
Note	This error code is disabled if the washer model does not have an Auxiliary Heating option
NO PROX SENSOR OUTPUT	
Condition	This error occurs when the machine control does not detect output from the proximity sensor(s) when the cylinder has been commanded to turn.
Action	When detected, there is a short delay before the error is active. When active, the control turns off the motor and all relays.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
PROX SENSOR OUT OF RANGE	
Condition	This error occurs when the machine control sees output from the proximity sensor(s) that does not fall in the acceptable range for the particular washer or dryer model running at normal speeds. It also occurs when the machine control sees output from the proximity sensor that implies the tumbler is still turning when the control has commanded it to Stop.
Action	When detected, there is a short delay before the error is active. When active, the control turns off the motor and all relays.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
CONTROL BOARD XX	
Condition	This error occurs when the Main Control Board cannot command the input and outputs of the control system as required by the cycle programming.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and return the Machine to Idle Mode. If the prompt to Reset is not available, power must be cycled to the machine to reset the error.
GRAPHICS BOARD	
Condition	This error occurs when the Graphics Board cannot command the Main Control board as required by the cycle programming.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and

	return the Machine to Idle Mode. If the prompt to Reset is not available, power must be cycled to the machine to reset the error.
MODEL JUMPER MISSING	
Condition	This error occurs when there is no connection to Ground (Pin 7) on the Model Jumper Header.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met. The machine control checks for this condition when power is cycled and before starting every machine cycle.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
MODEL JUMPER CHANGED	
Condition	This error occurs when the jumper connections to Ground (Pin 7) on the Model Jumper Header have changed since the last control check.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met. The machine control checks for this condition when power is cycled and before starting every machine cycle.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
MODEL JUMPER/ DRIVE SIZE MISMATCH	
Condition	This error occurs when the jumper connections to Ground (Pin 7) on the Model Jumper Header do not match the VFD size code.
Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met. The machine control checks for this condition when power is cycled.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
MODEL JUMPER/ DRIVE PARAMETER	
Condition	This error occurs when the jumper connections to Ground (Pin 7) on the Model Jumper Header do not match the VFD parameters being used.
Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met. The machine control checks for this condition when power is cycled.

Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
NON-DEXTER DRIVE	
Condition	This error occurs when a non-Dexter VFD is installed in the machine.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met. The machine control checks for this condition when power is cycled and before starting every machine cycle.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE OVERCURRENT	
Condition	This error occurs when the control receives a message that the drive has experienced an over current condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE OVERVOLTAGE	
Condition	This error occurs when the control receives a message that the drive has experienced an over voltage condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE OVERHEAT	
Condition	This error occurs when the control receives a message that the drive has experienced an over heat condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE OVERLOAD	

Condition	This error occurs when the control receives a message that the drive has experienced an overload condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE GROUND FAULT	
Condition	This error occurs when the control receives a message that the drive has experienced a ground fault condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE LOW VOLTAGE	
Condition	This error occurs when the control receives a message that the drive has experienced a low voltage condition.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE INTERNAL	
Condition	This error occurs when the control receives a message that the drive has experienced an internal error.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE EXCEPTION	
Condition	This error occurs when the control receives a message that the drive has logged an exception code.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.

DRIVE COMMUNICATION	
Condition	This error occurs the control cannot communicate with the VFD.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DRIVE ENABLE	
Condition	This error occurs when the control sees a message that the VFD Enable circuit is not closed.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
DOOR SHUT, NOT LOCKED	
Condition	This error occurs when the Door Locked signal is not received within 1 second after the start of the cycle.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start, and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle mode.
SLOW SPIN	
Condition	This error occurs when the motor does not reach a target frequency while accelerating, within a specified time.
Action	When detected, the control turns off the motor and machine motion stops.
Exit	The machine will not start, and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle mode.
SPIN TIME	
Condition	This error occurs when the motor does not reach a target frequency while decelerating, within a specified time.
Action	When detected, the control turns off the motor and machine motion stops.
Exit	The machine will not start, and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle mode.
SLOW FILL	

Condition	This error occurs when the programmed water level is not reached within 7 minutes.
Action	When detected at 7 minutes into the stage, the control will display the "SLOW FILL ERROR" prompt, alternating with the normal Cycle Progress screen at a rate of 5 seconds on, 5 seconds off. Otherwise the cycle will continue normally. However, if the water level is still not met at 15 minutes into the stage, the cycle will end with the motor turned off and all relays turned off
Exit	The Error Code will continue to be displayed until the in-progress cycle is stopped and the control is returned to Idle Mode. It will then reset automatically.
SLOW DRAIN	
Condition	This error occurs when an empty water level is not reached within 5 minutes.
Action	When detected at 5 minutes from the beginning of the drain operation, the prompt "SLOW DRAIN ERROR" is displayed. The washing cycle continues, but the spin portion of the cycle will not occur. It is replaced by continued tumble until the cycle time is expired. If low water level is detected during spin, the control turns off the motor and all relays with no delay in action.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
EXCESSIVE VIBRATION	
Condition	This error occurs when excessive vibration is detected.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code in the General Settings section and return the Machine to Idle Mode.
OUT OF SERVICE	
Condition	This error occurs when the user has designated that the machine control should be made inoperable.
Action	When detected, the control turns off the motor and all relays. There is no delay in the action once the criteria are met.
Exit	The machine will not start, and the Error Code will continue to be displayed the user changes the Out of Service state.

Note: Whenever power is turned off to the washer, it **must** remain off for one minute. The washer will not operate properly if this is not done.

6 TROUBLESHOOTING

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

ATTENTION: Lors des opérations d'entretien des commandes, étiqueter tous les fils avant de les déconnecter. Toute erreur de câblage peut être une source de danger et de panne.

If any of the following symptoms occur on this washer, check the suggested remedies listed below. If all probable causes have been eliminated and the symptom still exists, contact your local Dexter agent for further troubleshooting assistance. See contact information at the end of this manual. Parts & Service Manuals from Dexter are also available for further troubleshooting assistance.

Symptom	Probable Cause	Suggested Remedy
Machine does not start	Power Supply	Check these areas: Circuit breakers, Voltage, Power leads, Power connections. Is front display lit?
	Door Switch	Check for continuity through door switch when door is closed. If no continuity, adjust or replace door switch.
	Fuses or circuit breaker	Check the 1.5 amp and 2.0 amp fuses (60 hz models) or circuit breaker (50 hz models) for continuity. If no continuity, replace fuse or breaker.
	Control Transformer	Check voltage output from control transformer for 24 VAC and 120VAC (50 hz models have 24 VAC only). If voltage is incorrect, check for proper transformer tap connection or replace transformer.
	Check PCB boards	Check all wire connections for sure contacts.
	Check wiring between PCB and VFD	Check data cable phone type connectors: unplug and replug with power removed.
	Check Door Lock Mechanism	Check that 120 VAC power (for 60 hz) or 24 VAC power (for 50 hz) is at door lock motor after start button is pressed.
Door does not lock	Check display for message	Follow tests described in fault code section.
	Door locking mechanism	Check to ensure that mechanism is receiving 120VAC for 60 hz models (or 24VAC for 50 hz models) from main relay PCB. If it is receiving power but not functioning, then replace mechanism.
	Door Switch	Check for continuity through door latch switch when door closed. If no continuity,

		adjust or replace door switch.
Door will not open	Thermoactuator	Check to see if thermoactuator(s) and/or its mechanism is stuck or binding and not allowing the door lock mechanism to open. Check to be sure that the locking thermoactuator is not receiving 24VAC during the last 1 1/2 minutes of the cycle. Also check to see that the unlocking thermoactuator is receiving 24VAC during the last minute of the cycle. If the timing and voltage are correct, replace the thermoactuator.
Door will not open	Door Rod	Check to see that door rod from mechanism to lock assembly is long enough to allow lock assembly to disengage. If not, adjust rod or position of mechanism.
	Door locking mechanism	Check that door lock mechanism is not stuck closed. If stuck, replace.
No hot water in detergent dispenser	Water Valve Coil	Check coil continuity at terminals and replace if no continuity. 120 VAC power (60Hz) only on for 20 second in wash bath. (24 VAC for 50 Hz models)
	Water Inlet	Check water inlet screens for blockage and clean screens if necessary.
	Water	Check to ensure that water is turned on and operating.
	Wire Harness	Check wire harness to valve.
Hot water does not enter tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity. Check for 120 VAC power (60 Hz) from main relay PCB. (24 VAC for 50 Hz models)
	Water Inlet	Check water inlet screens for blockage and clean if necessary.
	Water	Check to ensure that water is turned on and operating.
	Check Voltage	If appropriate voltage is not present at the valve, refer to the wiring diagram for your specific washer model. Check for voltage at the P4 Connector on the Relay PCB. Check for LED indication that the appropriate relay is activated.
	Pressure Switch	Check pressure switch continuity between terminals. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.

No cold water to tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to ensure that water is turned on and operating.
	Check Voltage	If appropriate voltage is not present at the valve, refer to the wiring diagram for your specific washer model. Check for voltage at the P4 Connector on the Relay PCB. Check for LED indication that the appropriate relay is activated.
	Pressure Switch	Check pressure switch continuity between terminal contacts. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
Water comes in but level does not rise	Drain Valve (open)	Check these areas: • Drain valve blockage • Drain valve motor and gear train. If power but drain valve does not close, replace valve. • Power to the drain valve. If no power to drain valve, check circuit for power.
	Check Voltage	If appropriate voltage is not present at the valve, refer to the wiring diagram for your specific washer model. Check for voltage at the P4 Connector on the Relay PCB. Check for LED indication that the appropriate relay is activated.
Water does not flush softener compartment	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to ensure that water is turned on and operating.
Water does not flush softener compartment	Pressure Switch	Check pressure switch continuity between terminals. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
Water level too high	Pressure Switch	Check for blockage in pressure switch hose. Check for pressure switch opening circuit across terminals. Replace switch if contacts do not open.
Water drains slowly	Drain System	Check hoses and drain valve for blockage. Check if inadequate size. If necessary check building drains for blockage.

Machine does not turn	VFD	Review indicator lights displayed on VFD. See VFD indicator section for more info. If no display, turn power off to machine at breaker for 2 minutes and turn power back on to reset. If still no display, replace VFD.
Machine tumbles in one direction	VFD	Review indicator lights displayed on VFD. See VFD indicator section for more info.
		Inspect yellow enable wires from main relay PCB and at VFD.
Excessive vibration	Mounting System	Check these areas: • Strength of mounting structure, concrete or base. • Mounting bolts may be loose and need tightening.
	Drive Belt	Worn drive belt can cause vibration and noise.
	Loading	Note: Small loads contribute to out of balance loading and increase vibration.
Machine does not spin	Pressure Switch	Refer to the wiring diagram for your specific washer model. Check for LED indication on SW1 and/or SW2 that water level is still present. If the LED is NOT illuminated, then water level is still present.
Machine starts and does not operate	VFD	Check for Error codes- Refer to individual Error code descriptions.
Machine does not stop	Main PCB	Main PCB controls time cycle at end of cycle
	Braking Resistors	Check braking resistors for continuity. Verify ohms resistance.
Water leakage around loading door	Door Adjustment	Door may need adjustment due to abuse or wear. Check tightness around perimeter using a dollar bill. Adjust left to right tightness by shims at door lock or hinge side. It is important to center gasket to tub opening before tightening door to hinge bolts. Chalk may be used on tub front to show point of contact with tub. If gasket is deformed, worn, or damaged, replace. Refer to parts section for door gasket expander kit.

7 TRANSIENT VOLTAGE SURGE SUPPRESSORS

IMPORTANT

Like most electrical equipment your new machine can be damaged or have its life shortened by voltage surges due to lightning strikes which are not covered by factory warranty. Local power distribution problems also can be detrimental to the life of electrical components. We recommend the installation of transient voltage surge suppressors for your new equipment. These devices may be placed at the power supply panel for the complete installation and don't require an individual device for each machine.

These surge protectors help to protect equipment from large spikes and also from small ongoing spikes in the power that occur on a day to day basis. These smaller surges can shorten overall life of electrical components of all types and cause their failure at a later date. Although they can't protect against all events, these protective devices have a good reputation for significantly lengthening the useful life of electronic components.

Electronic components are helped to have a longer useful life when they are supplied with the clean stable electrical power they like.

We are including the following names and website links of a few suppliers of these devices for those who don't currently have a source.

MANUFACTURER	LINK
MCG Surge Protection	mcgsurge.com
Eaton Corporation	eaton.com/us/en-us
Schneider Electric	se.com/us/en
Asco Power Technologies	ascopower.com/us/en
Emerson Electric Co.	emerson.com/en-us

8 SERVICE AND PARTS

The following parts are provided with each machine for use in installation.

For T-350, 450, 650, 675, 750

Dexter Part Number	Description	Quantity
9990-027-011 (60Hz)	Hose, Water Supply	2
9990-024-015 (50Hz)	Hose, Water Supply, Red end	1
9990-024-016 (50Hz)	Hose, Water Supply, Blue end	1
8641-242-000 (All)	Washer, Inlet Hose	2
9565-003-001 (All)	Strainer, Inlet Hose	2

For T-950, 975, 1450, 1475

Dexter Part Number	Description	Quantity
9990-027-011 (60Hz)	Hose, Water Supply	2
9990-027-013 (60Hz)	Hose, Water Supply (Large)	2
9990-024-015 (50Hz)	Hose, Water Supply (Red end)	1
9990-024-016 (50Hz)	Hose, Water Supply (Blue end)	1
9990-024-017 (50Hz)	Hose, Water Supply (Red end-Large)	1
9990-024-018 (50Hz)	Hose, Water Supply (Blue end-Large)	1
8641-242-000 (All)	Washer, Inlet Hose	4
9565-003-001 (All)	Strainer, Inlet Hose	4

Contact distributor or Dexter Laundry, Inc. if a steel-mounting base is required.

For service and parts information, contact your local Dexter agent. To find your local Dexter agent, use the Distributor Locator at the website shown below. If a Dexter agent is not available, contact **Dexter Laundry, Inc.** directly as listed below:

Mailing Address: 2211 West Grimes Avenue
Fairfield, IA 52556
USA

Phone: 1-800-524-2954

Website: www.dexter.com