

SUPPLEMENTAL INSTRUCTIONS

Wall Curbs WWC5

WARNING

For use on non-combustible walls only.
Do not install on combustible walls.
Installation on combustible walls can result in fire.
See INSTALLATION Step 7 on page 3.

Overview

WWC5 wall curb products are optional accessories that can be installed between the Bard wall-mount product and an exterior wall surface to replace equipment on an existing building or new construction projects. The wall curbs in this manual provides unit upgrade options with minimal wall modifications. Typical unit upgrades include replacement of older 2.5 to 3 ton units or older HVAC equipment with new Bard 3.5 to 6 ton wall-mount products.

Curb Construction

WWC5 curb models are available in Beige (-X), White (-1), Buckeye Gray (-4), Desert Brown (-5) and Dark Bronze (-8). Curb model numbers will be followed by the color code when ordering. Painted cabinet construction is comprised of 20 gauge zinc coated steel. Parts are cleaned, rinsed, sealed and dried before a polyurethane primer is applied. The cabinet coating is completed with a baked on textured enamel. The resulting finish is designed to withstand 1000 hours of salt spray tests per ASTM B117-03. WWC5-S stainless steel curb models are also available. All curb models in this manual are shipped packaged in a flat box and assembly is required before use.

The curb is insulated with an anti-microbial flame/smoke resistant non-fiberglass cotton material. Middle partitions are used in all curb designs that seal and separate the return and supply air paths. The curb does not include a back panel, and the back of the curb will be open to the wall surface. Sealing the back of the curb to the wall surface is required to avoid water infiltration and air leakage from the supply and return air path.

Wall Curb Information Chart								
Curb Model	New Unit Model Using Curb	New Unit Connections			Curb Dimensions			Application
		Supply	Return	Supply and Return	Height	Width	Depth	Upsize Existing Unit
WWC5-*	T36S, T42S, T48S, T60S, T42H, T48H, T60H, W42A, W48A, W60A, W72A, W42H, W48H, W60H	9.88" x 29.88"	15.88" x 29.88"	30.00"	85.00"	42.13"	8.07"	WA30, WA36, W30A, W30L, W36A, W36L, W30H, W36H, T24H, T30H, T30S

* X = Beige, 1 = White, 4 = Gray, 5 = Desert Brown, 8 = Dark Bronze. WWC5-S stainless steel models also available.



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Fasteners required to attach the Bard wall-mount unit to the curb are supplied from the factory. These include carriage bolts and Keps nuts that will be used to install the unit to the curb. A foam seal is provided between the unit flanges and curb front surface.

Fasteners required to attach the curb to the wall are field supplied and are specific to wall construction. Installation and seismic requirements must follow all national, state and local codes. Review the wall mount installation instructions and all other documentation provided with the wall-mount unit for further guidelines before installing this product.

Basic Curb Use and Pre-Installation Procedures

It is important to calculate the total unit duct static of the installation. If the wall openings or ductwork is for existing equipment, it is important to review the total static pressure the new Bard wall mount will operate at when used. Typical static limitations are .5" WC for standard wall-mount units. In addition, as airflow amounts increase when selecting a new larger cooling capacity unit, duct statics also increase. A professional contractor or engineer must review the duct static of the installation and compare the results with the unit performance data provided in the specifications and user manuals of the new Bard wall mount.

Before installing the wall curb, inspect the site. The supply opening of the new wall-mount unit that will use the wall curb must be aligned with the supply wall opening. A stub duct will be used to transition between the new unit supply opening and the existing wall supply to avoid air leakage and meet any requirements for supply clearances provided in the wall mount installation instructions. Note electrical entrances for the new wall-mount product that may require re-routing wiring for power and the thermostat. Review all electrical requirements of the new wall-mount unit including voltage, phasing and wire and breaker sizes. It is important to follow all national, state, and local electrical codes.

Review the wall surface where the new wall-mount unit is to be installed. The wall surface needs to be flat to allow the curb to be sealed to the wall. Light corrugated surfaces may need to have siding trimmed and framed. Heavy corrugations may require a plate that is sealed to the wall. Verify the wall structure will support the weight of the new wall-mount unit and the curb. Review any obstructions on the wall that may interfere with curb installation, and make sure the unit has adequate ground clearance per the instructions for the new wall-mount product.

Installation

Installer Note

New Bard wall-mount W42 and W48 models are 85" tall and will not overhang the bottom of the WWC5 curb. New Bard wall-mount W60 and W72 models are

93" tall and will overhang the bottom of the WWC5 curb by 8". The WWC5 product is designed and tested to function with the 8" overhang when used with the W60 and W72 products.

Hardware items included:

- Twelve (12) 1" Bolts
- Thirty two (32) Screws
- Twenty four (24) Washers
- Twelve (12) Lock Nuts

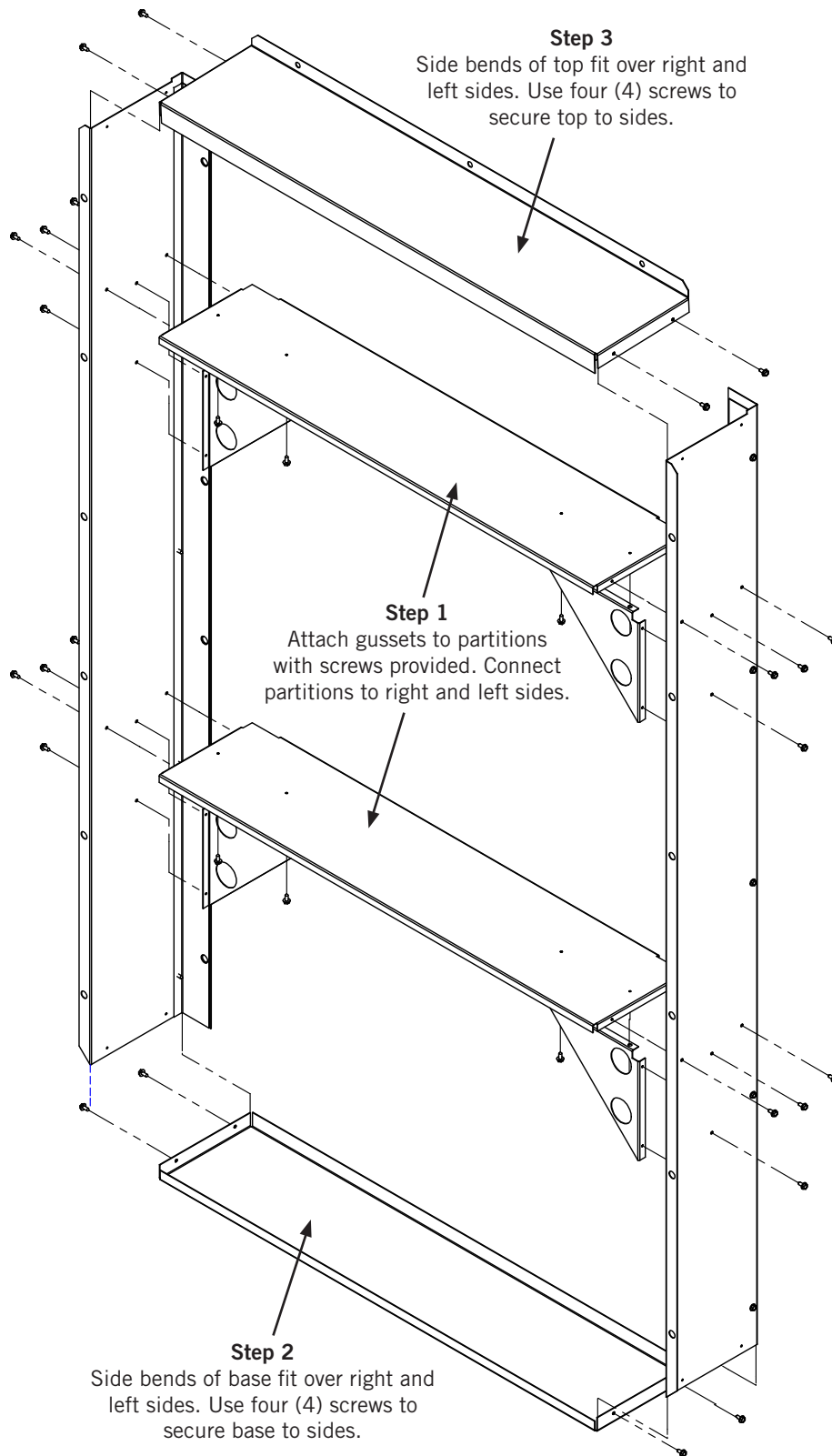
Field-supplied tools needed for installation:

- Appropriate personal protection equipment, including gloves and safety glasses
- 5/16" nut driver
- 1/2" (13mm) wrench or deep well socket
- Safe method of lifting equipment
- Outdoor-rated silicone caulk
- Field-supplied wall fasteners

Installation Procedure

1. Assemble wall curb per Figure 1.
2. Attach curb to wall first. The back flanges for attaching to the building wall are formed so they will line up with the mounting pattern of original 3-ton Bard units, and so the weight will bear on the wall's original structural design. Ensure the installed assembly is square by measuring corner to corner.
3. Because the new curbs (and air conditioners) are longer than the original units, one or two additional fasteners to the wall near the bottom of the curbs should be added. Fasteners for attaching the curb to the wall are not included in the kit. 5/16" diameter fasteners of appropriate length and type for wall construction should be used.
4. When installation requirements are such that the original mounting holes on the wall cannot be used, or the unit(s) must be shifted left or right for some reason, they should be kept as centered as reasonably possible over the supply and return air openings in the wall.
5. Lift unit into position and support while the supplied bolts, washers and nuts are installed fastening the unit to the curb. See Figure 2 on page 4.
6. Caulk the flanges of the wall curb where they meet the structure. Caulk the top of the unit where it meets the wall curb.
7. **WARNING:** *Supply duct to be field supplied and connected from the unit duct flanges to the building's wall—maintaining all required clearances for the basic HVAC unit. Refer to unit instructions and serial plate for required clearances.*

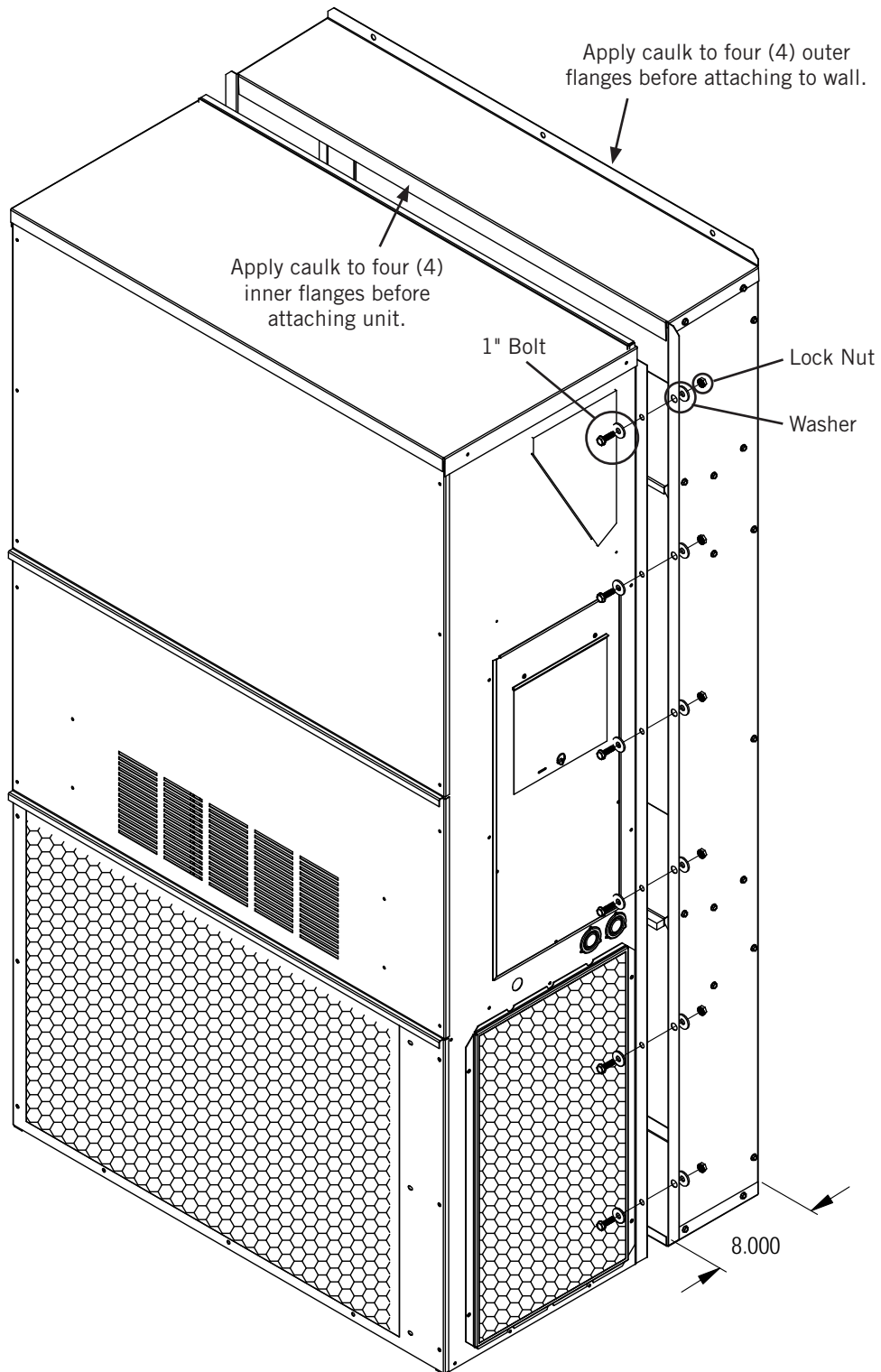
FIGURE 1
Assembly of Wall Curb



MIS-1496 A

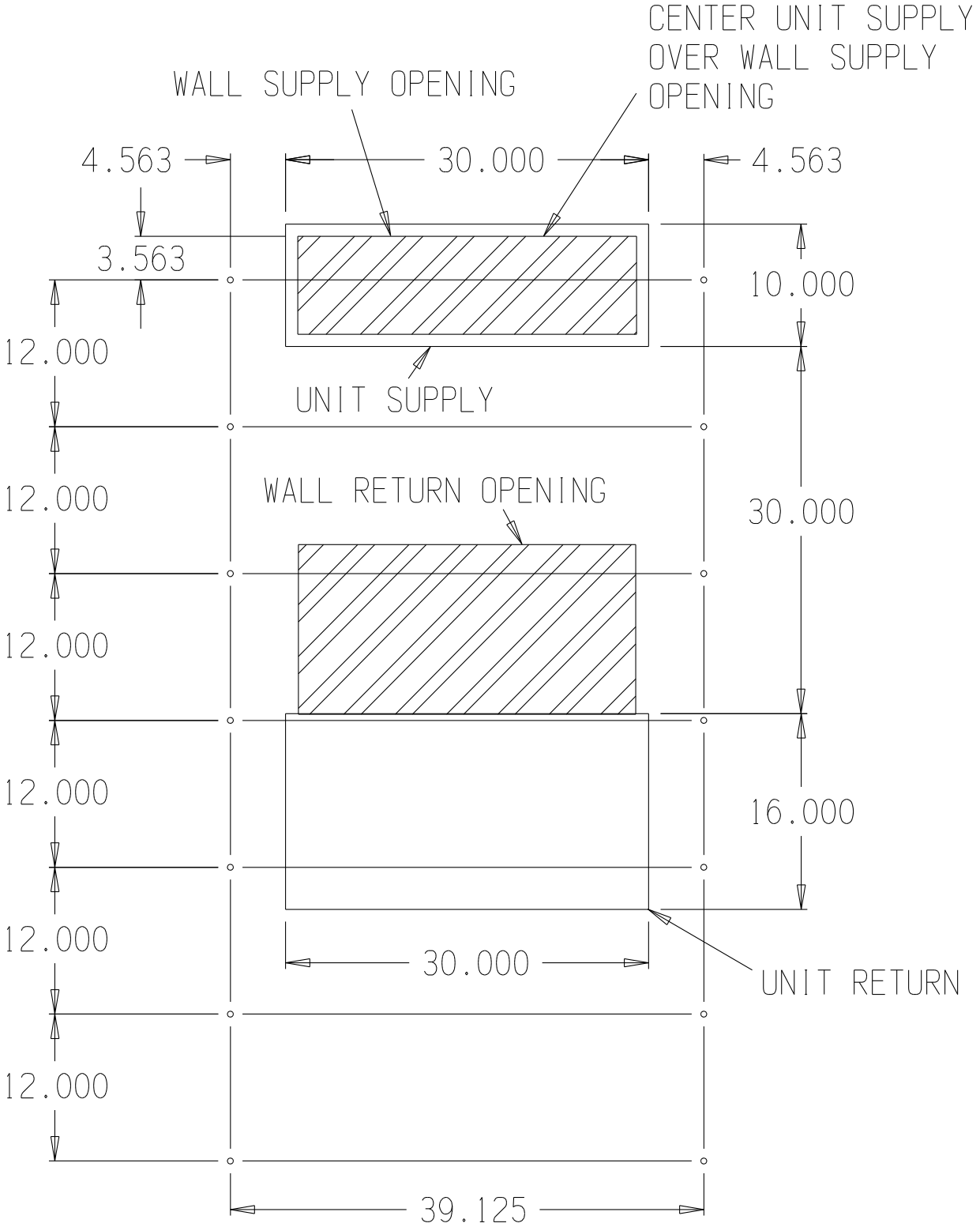
FIGURE 2
Attaching Wall Curb to Unit

NOTE: Assemble curb and attach to wall before bolting unit to curb.



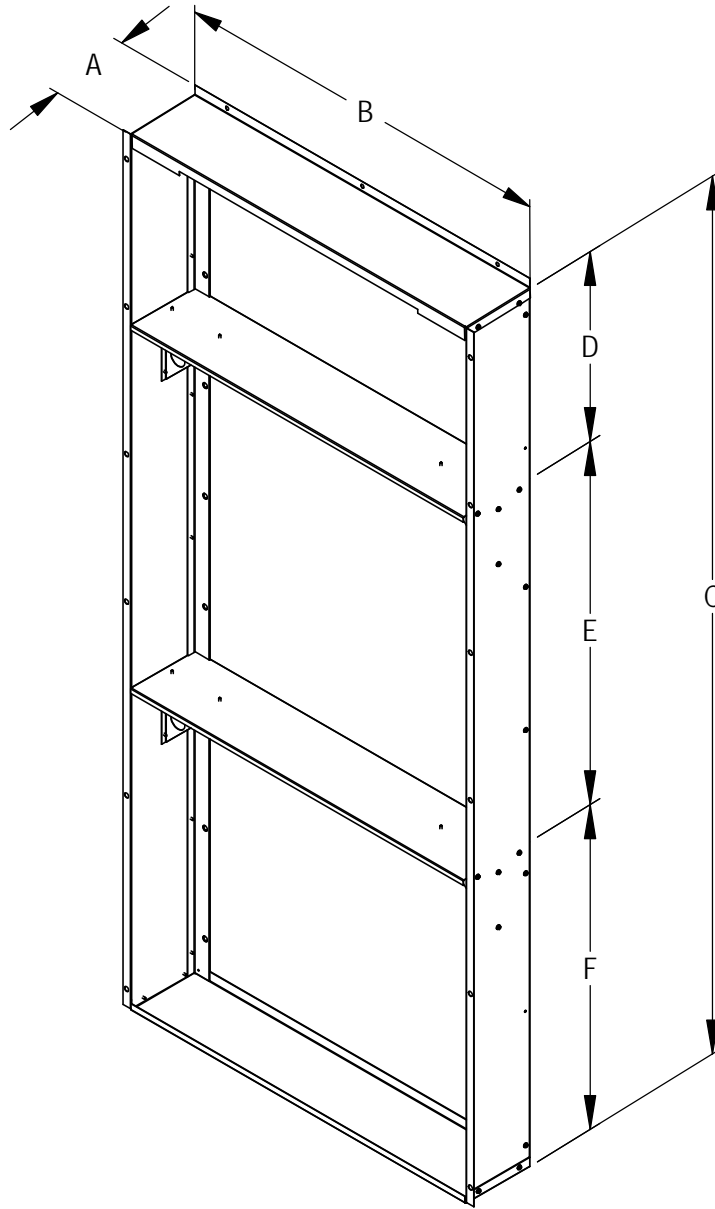
MIS-1497 A

FIGURE 3
Mark Wall for WWC5 Wall Curb



MIS-1516

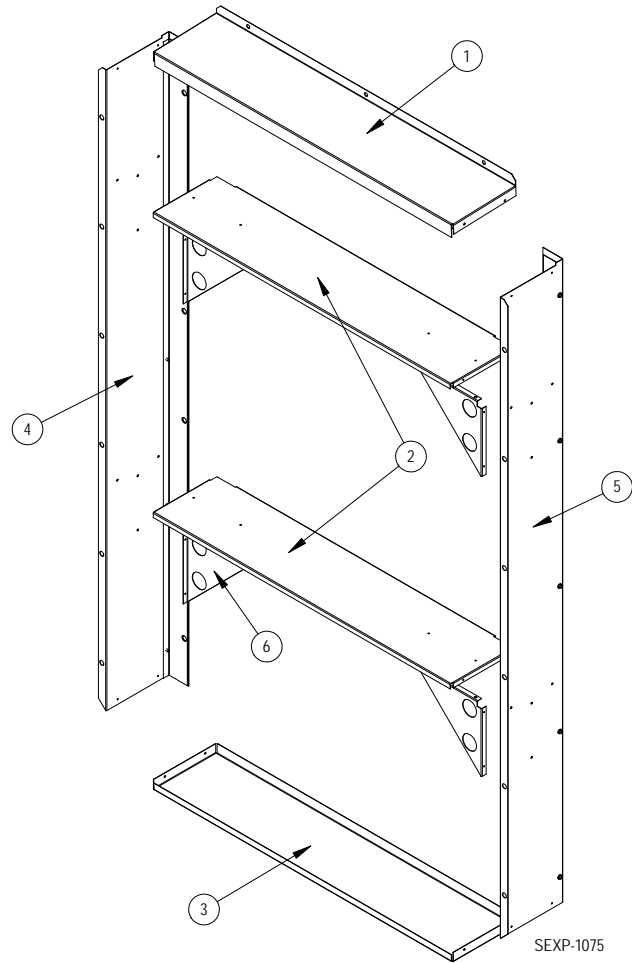
FIGURE 4
Dimensional Detail of Wall Curb



Dimensions (Inches)						
Model	A	B	C	D	E	F
WWC5	8.07	42.13	85.00	20.63	39.38	25.00

MIS-2702 B

Replacement Parts



Dwg No.	Part Number	Description	WWC5
1	507-223-*BX ①	Top	X
1	507-295 ②	Top	X
2	521-345BX	Partition	2
3	527-307BX	Base	X
3	527-411BX ②	Base	X
4	501-387-*BX ①	Left Side	X
4	501-625BX ②	Left Side	X
5	501-388-*BX ①	Right Side	X
5	501-626BX ②	Right Side	X
6	141-275BX	Gusset	4
NS	1012-086	Screw	32
NS	1012-090	1" Bolt	12
NS	1012-109	Washer	24
NS	1012-210	5/16" Nut	12

① Parts are manufactured with various paint color options:
 X = Beige, 1 = White, 4 = Buckeye Gray,
 5 = Desert Brown, 8 = Dark Bronze

② Parts are manufactured from stainless steel Code "S"