Code Compliance Research Report
CCRR-0296

Issue Date: 08-30-2019
Revised Date: 07-17-2025
Renewal Date: 07-31-2026

DIVISION: 09 00 00 FINISHES
Section: 09 69 00 Access Flooring

REPORT HOLDER:
Tate Access Floors, Inc.
7510 Montevideo Road,
Jessup, MD 20794
877-999-8283

REPORT SUBJECT:
ConCore® 1000 Raised Access Floor Systems

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)

Evaluated in accordance with ICC-ES AC300 – Acceptance Criteria for Access Floors, revised March 2014.

NOTE: This report references the most recent Code editions noted. Section numbers in earlier editions may differ.

1.2 ConCore® 1000 Raised Access Floor Systems have been evaluated for the following properties:

- Structural Performance
- Non-Combustibility

1.3 ConCore® 1000 Raised Access Floor Systems are for use in computer rooms and general office areas. The floor systems shall provide a cavity below the floor for the installation of electrical, communication, HVAC, or similar utilities. Panels are limited to occupancies (nonresidential) other than IBC Groups R-1, R-2, R-3, and R-4.

2.0 STATEMENT OF COMPLIANCE

ConCore® 1000 Raised Access Floor Systems comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 ConCore® 1000 Raised Access Floor Systems consists of steel, cement filled panels supported by steel pedestals. Panels may be mounted to pedestals with or without stringers. The base of pedestals are adhered to the concrete subfloor.

3.2 Panels: ConCore® 1000 panels are 24 in. square, shells consisting of a flat steel top sheet welded to a formed steel bottom sheet, filled with a lightweight cement. See Figure 1.

3.3 Supporting structure: ConCore® 1000 panels installed in the PosiLock system are supported by pedestals at each corner, and mechanically fastened to the pedestal head with machine screws. For the gravity-held Non-Cornerlock panel system, the ConCore panel rests directly on stringers without fastening.

3.3.1 Pedestal Heads:

3.3.1.1 PosiLock® pedestal assembly consists of a pedestal head and pedestal base (see Section 3.3.2). The pedestal head is a 0.114 in. thick die formed galvanized steel plate; factory welded to a ¾ in. – 10 UNC threaded steel rod. A ¾

in. – 10 UNC nut is used to fix the height of the pedestal. Figure 2.

3.3.1.2 Flat Cap pedestal assembly consists of a pedestal head and pedestal base (see section 3.3.2). The pedestal head is an 11-gauge thick die formed galvanized steel plate, factory welded to a ¾ in. – 10 UNC or 7/8 in. – 10 UNC threaded steel rod. A corresponding nut is used to fix the height of the pedestal. Types 6IF and 3IFS utilize the 7/8 in. dia. rod. Types 1A utilize the 3/4 in. dia. rod. See Figure 3.

3.3.2 Pedestal Bases:

3.3.2.1 Type 1A is a 7/8 in. square, 17-gauge thick walled, galvanized steel tube that is factory welded to a 0.083 in. thick, 4 in. square, embossed, galvanized steel plate. Figure 5.

3.3.2.2 Type 6IF is a 1-1/4 in. dia. Schedule 40 galvanized steel pipe that is factory welded to a 0.25 in. thick, 6 in. square, galvanized steel plate. Figure 6.

3.3.2.3 Type 3IFS is a 1-1/4 in. dia. Schedule 40 galvanized steel pipe that is factory welded to a 0.25 in. thick, 5 in. square, galvanized steel plate. Figure 7.

3.3.2.4 Type 5EF is a 1-1/2 in. dia., 1/16" in. thick walled, galvanized steel pipe that is factory welded to a 0.188 in. thick, 6 in. square, galvanized steel plate. Figure 8.

3.3.3 Steel pedestal bases are adhered to concrete via Seal Bond 95, applied in a 1/8-inch thickness.

3.3.4 Stringers are provided for lateral support between pedestals. Stringers manufactured from ASTM A653 CS Type B, Zinc-iron alloy A40 sheet steel, in lengths of 2 ft. or 4 ft. Figure 4. Stringers are only installed with the Flat Cap Pedestal Assembly.

4.0 PERFORMANCE CHARACTERISTICS

4.1 The ConCore® 1000 Raised Access Floor Systems comply with the uniform and concentrated loads specified in IBC Table 1607.1, Item 2, for access floor systems for office and computer use. See Table 3 for pedestal allowable design loads.

4.2 The Seal Bond 95 adhesive complies with the requirements of ICC-ES AC05 for adhesion of steel to concrete, for type I, Class 1. See Table 4 for pedestal base types and allowable design loads.

4.3 The ConCore® 1000 Raised Access Floor Systems utilizing the bare panel was tested and found to be non-combustible in accordance with IBC Section 703.3.1 [703.5.2].

5.0 INSTALLATION

5.1 General:

ConCore® 1000 Raised Floor Systems must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation. See Table 2 for fastening schedule.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 Changes in the floor elevation shall be addressed in accordance with IBC Section 1003.5.

6.3 Interior floor finishes shall comply with IBC Section 804.

6.4 Use in fire-resistance-rated construction is outside the scope of this report.

6.5 Seismic design is outside the scope of this report and shall comply with ASCE/SEI 7 Section 13.5.7.

6.6 Use as a Special Access Floor is outside the scope of this report and shall comply with ASCE/SEI 7 Section 13.5.7.2.

6.7 The ConCore® 1000 Raised Access Floor Systems are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-647).

7.0 SUPPORTING EVIDENCE

7.1 Data in accordance with the ICC-ES AC300, Acceptance Criteria for Access Floors, revised March 2014.

7.2 The panels were tested per ASTM E 2322-03, Standard Test Method for Conducting Transverse and Concentrated Load Tests on Panels used in Floor and Roof Construction to determine the maximum deflection and permanent set of the access floor system under uniform loading.

7.3 Data in accordance with the ICC-ES AC05, Acceptance Criteria for Sandwich Panel Adhesives, approved June 2009, editorially revised May 2018.

8.0 IDENTIFICATION

The ConCore® 1000 Raised Access Floor Systems are identified with the manufacturer's name (Tate Access Floors), address and telephone number, the product name, manufacturing date, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0296).

9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	APPLICABLE CODE SECTIONS[1]
	IBC SECTION
Surface Burning	804
Structural Performance	Table 1607.1
Non-combustibility	703.3.1

[1]Section numbers pertain to the most recent edition cited in Section 1.1 of this Report.

TABLE 2 – FASTENING SCHEDULE

Connection	Fastener	Quantity
ConCore® panel to PosiLock®	¼ in. – 20 x 1.048 in. long flat-head machine screw	One, each corner
PosiLock® pedestal base to Concrete substructure	Seal Bond 95 adhesive	applied in 1/8-inch thickness
2 in. Stringer to Flat Cap pedestal head	¼ in. – 20 x 2-1/2 in. long flat-head machine screw	One, each support
1 in. Stringer to Flat Cap pedestal head	¼ in. – 20 x 1-3/4 in. long flat-head machine screw	One, each support

TABLE 3 – PEDESTAL AND PANEL ALLOWABLE LOADS

Pedestal Model	Maximum Pedestal Height (inches)	Pedestal Base		Allowable Axial Load (lbf)	Pedestal Allowable Lateral Load (in-lbs) (SF=5)
		Attachment	Substrate		
Type 1A	48	Seal Bond 95 Adhesive	Concrete	1,411	348
Type 6IF	36	Seal Bond 95 Adhesive	Concrete	4,710	1,780
Type 3IFS	36	Seal Bond 95 Adhesive	Concrete	4,710	1,346
Type 5EF	36	Seal Bond 95 Adhesive	Concrete	2,710	1,482

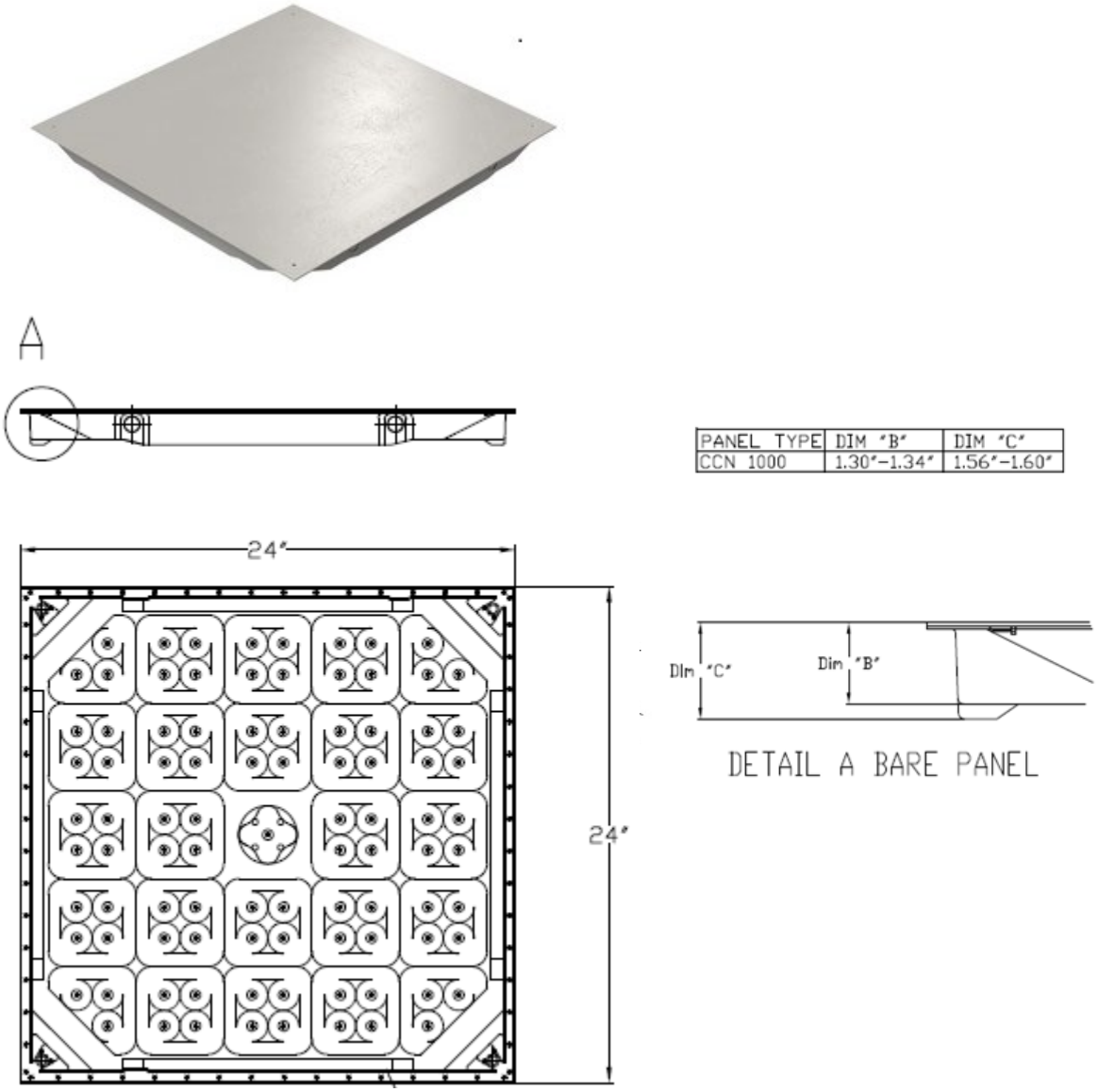

FIGURE 1 – ConCore® Panels

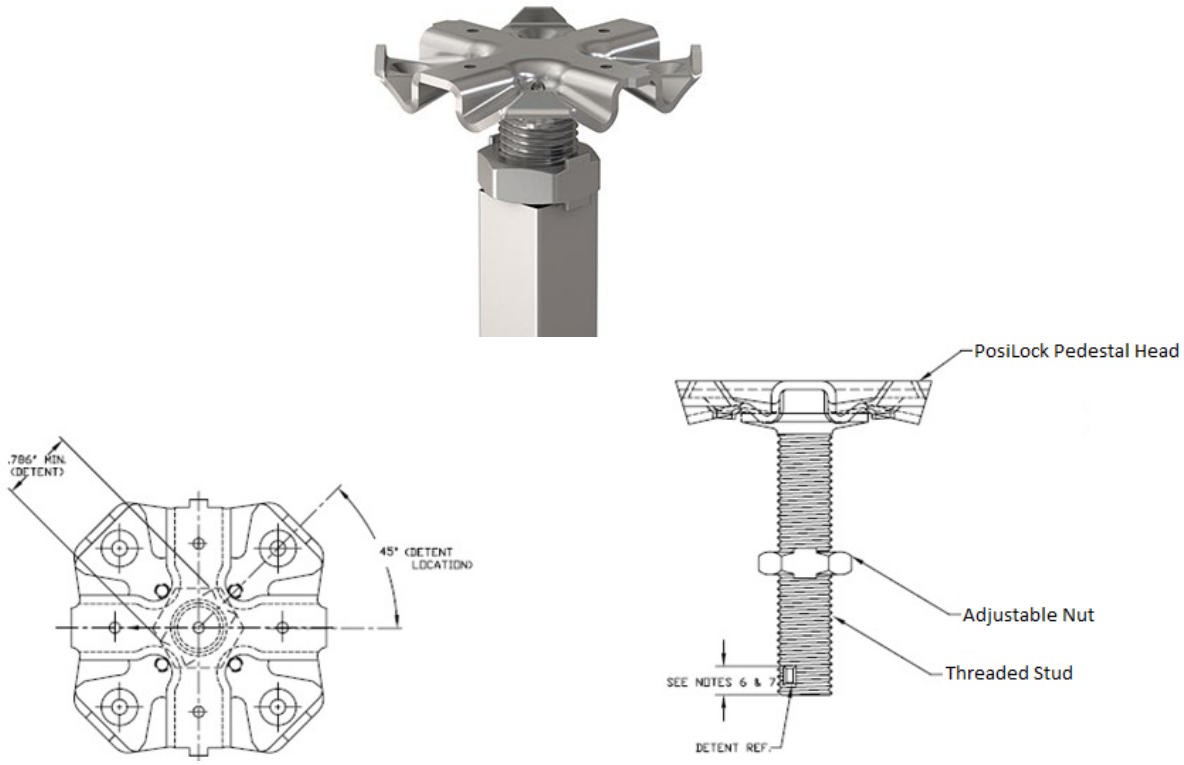

FIGURE 2 – PosiLock® Pedestal Head

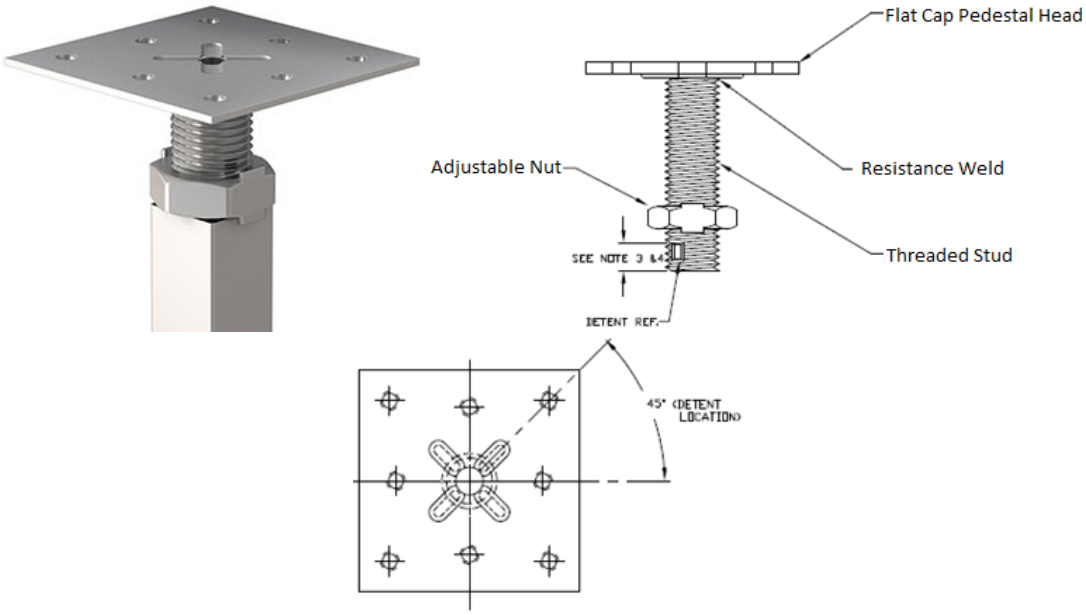

FIGURE 3 – Flat Cap Pedestal Head

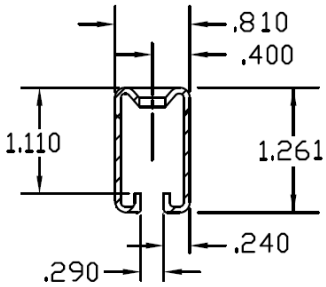

FIGURE 4 – Support Stringer

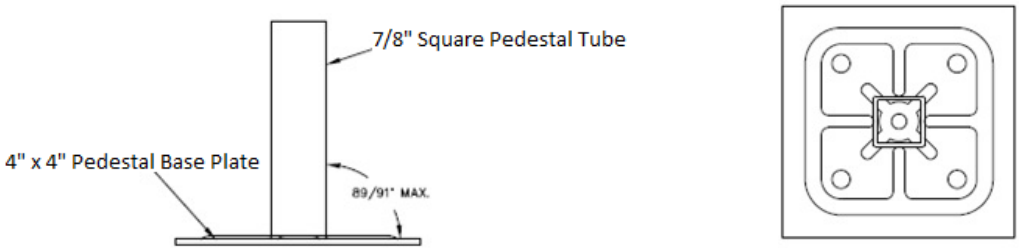

FIGURE 5 – Type 1A Pedestal

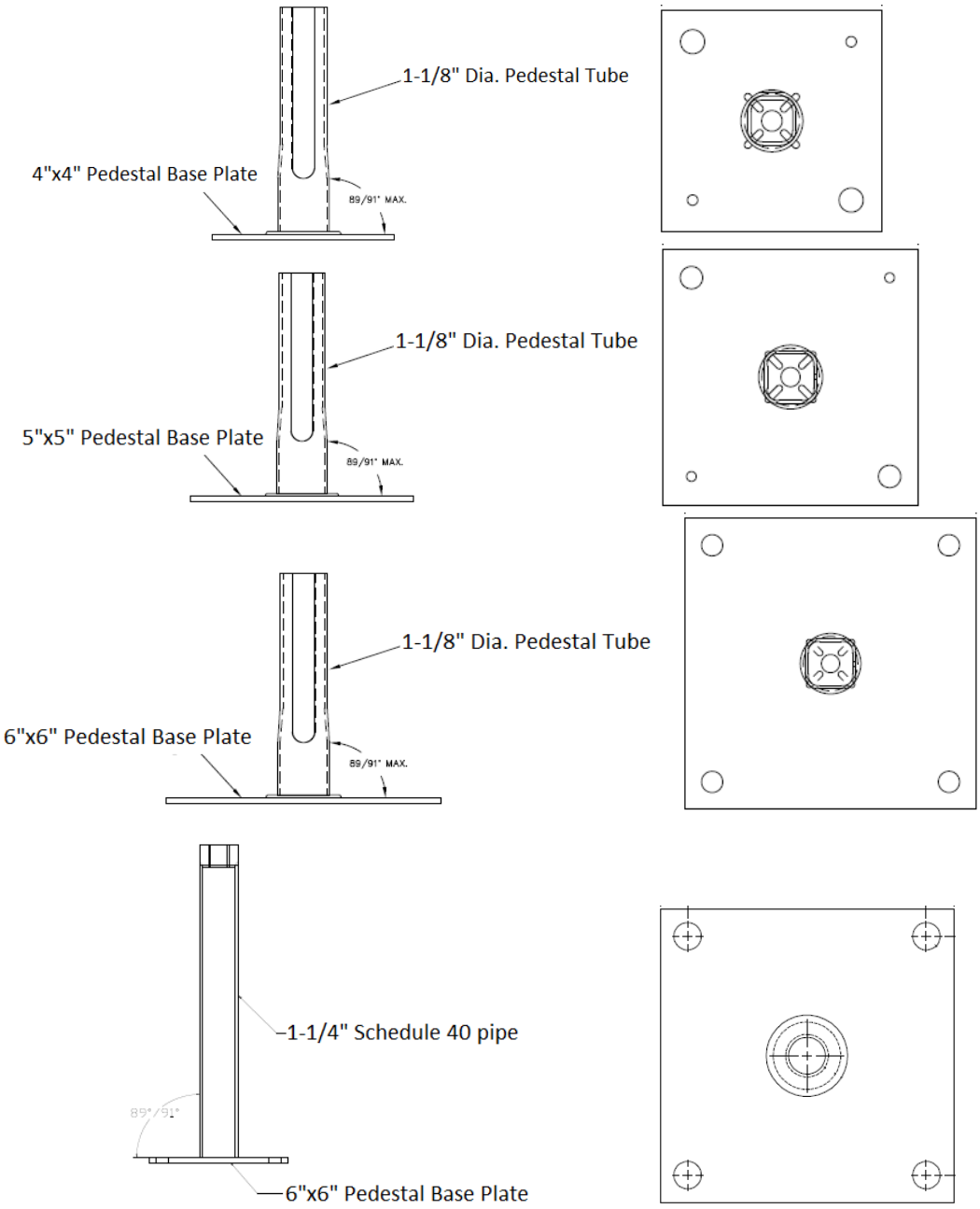

FIGURE 6 – Type 6IF Pedestal

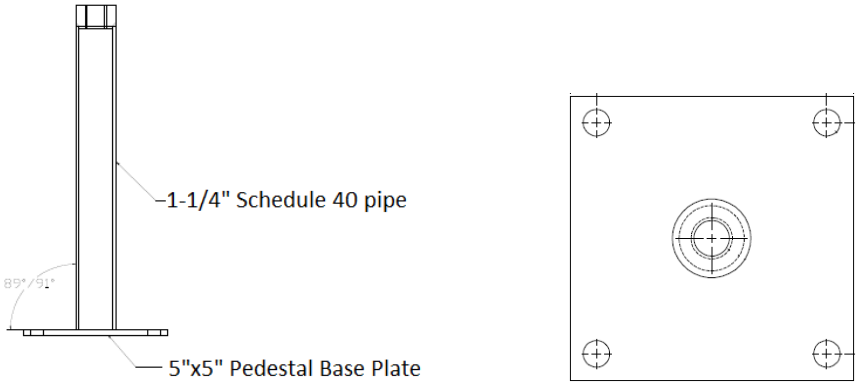

FIGURE 7 – Type 3IFS Pedestal

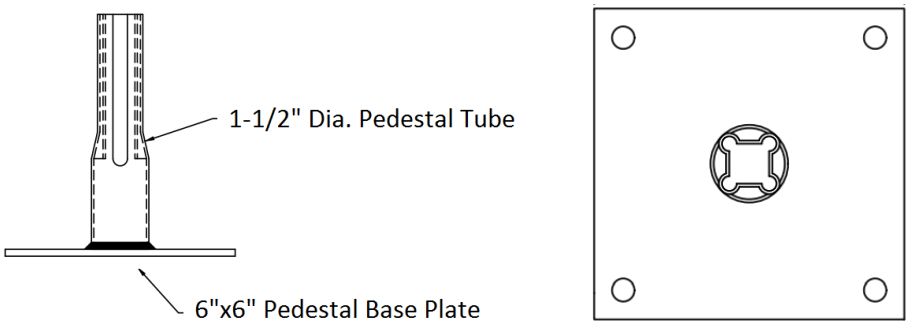

FIGURE 8 – Type 5EF Pedestal