SECTION 054000
COLD-FORMED METAL FRAMING

PART 1 – GENERAL

1.01 SUMMARY

A. MidWall™ as distributed by CAP Industries, Inc. is designed to support out-of-plane loading in partial wall systems that are unsupported at the top track. The out-of-plane loads are transferred to the floor system through a ½" thick plate nested in the flanges of the member with two 3/8" diameter fasteners used for the connection. Available in two lengths, 24" and 48". MidWall™ may be used in place of standard framing members, or in conjunction with them to frame the wall.

1.02 SECTION INCLUDES

A. Impact Tested Kneewall Bracing.

1.03 SUBMITTALS

A. Product data for each type of Kneewall specified.

1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in unopened factory packaging to the jobsite and store in original packaging in a climate controlled location away from moisture.

1.05 PROJECT CONDITIONS

A. Products must be installed in an interior climate controlled environment.

1.06 WARRANTY

A. Standard CAP Limited Lifetime Warranty against material and manufacturing defects.

PART 2 – PRODUCTS

2.01 MANUFACTURER

A. Acceptable Manufacturer /Distributor: Cap Industries, Inc., 10722 Tucker Street, Beltsville, MD. 20705 USA;
Telephone: 301-937-4383, Fax: 301-937-6850,
Web address: www.CapDrywallTrims.com

B. Substitutions: Not permitted
C. Provide all Kneewall Bracing from a single source.

2.02 MATERIALS

A. Partial Wall Framing: MidWall™

1. MidWall™: ASTM A1003/A 1003M, ASTM A653/A653M, Grade 50 (340), 50ksi (340MPa) minimum, 65ksi (450MPa) minimum yield strength, G-90 (Z275) hot-dipped galvanized coating. Material Thickness = 118mil (10 gauge, 0.1017" design thickness)
2. MidWall™ Plate: ASTM A36/A36M 08, 36ksi (250MPa) minimum yield strength, 58-80ksi (400-500MPa) tensile strength, ½" thick.
3. Pre-drilled holes for Phillips head screws.

2.03 COMPONENTS

A. Attachments;

1. ½" Thick steel anchor plate with factory machined holes.
2. 250 Midwall™ 1/2" Anchorage (4,000 psi minimum concrete strength)
    a. 500 lbs Max. Applied Tention
        1. ½" Carbon Steel Kwik Bolt 3 Expansion Anchor, 3 ½" Embed. (Hilti)
        2. ½" Carbon Steel Kwik Bolt 3 Expansion Anchor, 3 ½" Embed. (Hilti)

b. 1000 lbs. Max. Applied Tention in one Anchor

1. ½" Wedge-Bolt, 2 ¼" Embed. (Powers); ½" Carbon Steel Kwik Bolt 3 Expansion Anchor, 2 ¼" Embed . (Hilti)
2. ½" Trubolt Wedge, 2 ¼ Embed. (Red Head)

c. 1500 lbs. Max. Applied Tention in one Anchor

1. ½" Carbon and Stainless Steel Power-Bolt, 2 ½" Embed. (Powers)
2. ½" Carbon Steel Kwik Bolt 3 Expansion Anchor, 3 ½" Embed. (Hilti)

2. 362/600 Midwall™ 3/8" Anchorage (4,000 psi minimum concrete strength)

a. 1500 lbs Max. Applied Tention in one Anchor

1. 3/8" Wedge-Bolt, 3" Embed. (Powers)
2. 3/8" Carbon Steel Kwik Bolt 3 Expansion Anchor, 3 ½" Embed. (Hilti)

b. 2000 lbs Max. Applied Tention in one Anchor

1. 3/8" Wedge-Bolt, 3 ½" Embed. (Powers)
2. 3/8" HAS-E Standard (ISO 898 Class 5.8)w/ HIT-HY 150 MAX. Adhesive, 3 3/8" Embed. (Hilti)
3. 3/8" ASTM A307 Threaded Rod w/ A7 Adhesive, 3 3/8" Embed. (Red Head)

c. 2500 lbs Max. Applied Tention in one Anchor

1. 3/8" Wedge-Bolt, 3 ½" Embed. (Powers)
2. 3/8" HAS-E Standard (ISO 898 Class 5.8)w/ HIT-HY 150 MAX. Adhesive, 3 3/8" Embed. (Hilti)
3. 3/8" ASTM A193 GR. B7 Threaded Rod w/ A7 Adhesive, 3 3/8" Embed. (Red Head)

d. 3000 lbs Max. Applied Tention in one Anchor

1. 3/8" HAS-SS (AISI 304/316 SS) w/ HIT-HY 150 MAX. Adhesive, 3 3/8" Embed. (Hilti)

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions in which the corner guard systems will be installed.

1. Complete all finishing operations, including painting, before beginning installation of corner guards.

B. Wall surface shall be dry and free from dirt, grease and loose paint.

3.02 PREPARATION

A. General: Prior to installation, clean substrate to remove dust, debris and loose particles.

3.03 INSTALLATION

A. Midwall™ 24" is generally used in interior half walls of less than 48" in height. Attach Midwall to 54 mil stud with #12 screws through all pre-drilled guide holes. Other studs in wall are typical infill studs.

B. Midwall™ 48" is used in interior half walls equal to or more than 48" in height. Use one Midwall 48" as a substitute for a stud at the specified spacing, or attach to a 54 mil stud with #12 screws through all pre-drilled guide holes.

3.04 CLEANING

A. At completion of the installation, clean surfaces with a neutral based, non-abrasive cleaner. Ammonia and alcohol based cleaners such as Windex® may also be used. Always use an abrasive free cloth.

END OF SECTION