ORDINANCE NO. 20071018-085

AN ORDINANCE AMENDING SECTION 25-12-113 AND SECTION 25-12-114 (ELECTRICAL CODE) OF THE CITY CODE REGARDING SPECIAL INSPECTIONS, HOMESTEAD PERMITS, AND THE INSTALLATION OF TYPE MC CABLE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. Section 25-12-113 (*Local Amendments to the Electrical Code - Administration*) of the City Code is amended to repeal and replace Section 80.19(C)(3) (*Booklet Program Permits*) to read:

(3) **Special Inspections Program.** The building official may establish by rule an inspection program for the installation of certain electrical components in one and two family dwellings within the zoning jurisdiction of the City. Under the program, the building official shall inspect work performed under one out of five of the applications submitted.

The special inspection program may apply to the installation of electrical equipment associated with the following:

1. installation of HVAC equipment, with or without ductwork, in a building or section of a building that was previously not served by an HVAC system;
2. replacement of a complete existing central heat and air system with or without ductwork;
3. replacement of or the addition to an existing unit of four or more supply or return duct runs; or
4. replacement of any existing self contained packaged units.

PART 2. Section 25-12-113 (*Local Amendments to the Electrical Code - Administration*) of the City Code is amended to repeal and replace Section 80.36 (B) (*Homestead Permit*) to read:

(B) **Homestead Permit.** A person who is not licensed to perform electrical work may perform electrical work within a residence owned by the person if the requirements of this section are met.

1. The residence is the person's homestead.

2. The work does not include electrical, mechanical and plumbing work that involves (1) the main electric service; and (2) reclaiming and charging a ducted heating and air-conditioning system containing refrigerant and natural gas plumbing systems.

3. The residence is the person's principal residence.

4. The person has not secured a homestead permit for another residence within the prior 24 month period.

5. The person must have owned and occupied the property as of January 1 of the tax year in which the person applies for a homestead permit.

6. A person must obtain a homestead permit and pay required permit fees before beginning any electrical, mechanical, or plumbing work. A person must apply for a homestead permit in person and must file an affidavit stating that the location at which the work is to be done is the person's homestead.

7. A person who has obtained a homestead permit may not allow or cause any person to perform electrical, mechanical, or plumbing work under the permit. The building official may suspend or revoke a homestead permit if work done under the permit is performed by anyone other than the person who obtained the permit.

8. A person may not transfer a permit to another person.

9. A person performing electrical, mechanical, or plumbing work under a homestead permit shall present a picture identification to verify that the person is authorized to perform work under the homestead permit when requested by the building official or his designee.

10. A homestead permit shall not be issued for electrical, mechanical, or plumbing work on a mobile, modular or manufactured home unless the homeowner owns the land on which the mobile, modular or manufactured home is located. A homestead permit shall not be issued if the mobile, modular or manufactured home is located in a mobile home park, mobile home community or other commercial premises.

PART 3. Section 25-12-114 (*Local Amendments to the Electrical Code - Technical*) of the City Code is amended to amend Section 330.12 and Section 330.30 and to add Figures 1 through 7 to Section 330.30 to read:

330.12 Uses Not Permitted. Type MC cable shall not be used if the cable will be subject to physical damage. Type MC cable shall not be used where exposed to destructive corrosive conditions, such as direct burial in the earth, in concrete, or where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or hydrochloric acids, unless the metallic sheath is suitable for the condition or is protected by material suitable for the condition. Type MC cable shall not be used as a service feeder or branch circuit feeder entering a panel or panel board in commercial buildings.

Exception: Type MC cable may be used as a service feeder or branch circuit feeder entering a panel or panel board in the portion of a mixed use building used for permanent residential use.

330.30 Installation. Except as otherwise provided in this section, Type MC cable shall be installed in compliance with this section, including Figures 1 through 7, Articles 300 (*Wiring Methods*), 490 (*Equipment, Over 600 Volts, Nominal*), 725 (*Class 1, Class 2, and Class 3 Remote-Control, Signaling, and Power-Limited Circuits*), and Section 770.52 (*Installation of Optical Fibers and Electrical Conductors*). The building official may approve an alternate method of compliance if he determines that the alternate method substantially satisfies the intent of this section.

(A) **Workmanlike manner.** Type MC cable shall be installed in a neat orderly and workmanlike manner. Cable shall not cross other cable, be routed diagonally through a building, or have excess slack. Cable that is installed vertically, must be plumb with the vertical framing of the structure. Cable that is installed horizontally must be level and parallel with the structure.

(B)[~~(A)~~] **Supported Cables.** Type MC cable shall be supported and secured at intervals not exceeding 6 feet (1.83m) where concealed, 3 feet (0.915m) where exposed, and within 12 inches (305 mm) of a connection to any panelboard or terminal/junction box. MC cable shall be supported immediately before and after every vertical and horizontal bend and in the middle of every horizontal bend. Except as otherwise provided for a lay-in type fixture, cable containing four or fewer conductors, sized no larger than No. 10 shall be secured within 12 inches (305 mm) of every box, cabinet, fitting, or other cable termination.

Exception: Within 18 inches of a lay-in type fixture that will allow cable to be supported on fixture support wire closest to the connector.

(1) Horizontal Runs.

(a) Cable installed in other than a vertical run through a bored or punched hole in wood or metal framing members, or through a notch in wooden framing members and protected by a steel plate at least 1/16 inch (1.59 mm) thick shall be considered supported and secured where such support does not exceed a 6 foot (1.83 m) interval.

(b) Bundling of cables is limited to three cables for each support ring. If more than three cables are required in an exposed location, the cable shall be racked together and uniformly spaced in parallel runs supported by steel channels. Steel channels shall be designed and UL listed for the application. Cables shall be fastened to the channels with metal cable clamps designed for the particular channel used.

(c) MC feeders, if permitted (including, but not limited to, unit load center feeders, and house panel feeders) shall be neatly supported by kindorf channel, mounted at the ceiling or as high as possible, and protected from physical damage. Kindorf channel shall be suspended from a ceiling in accordance with manufacturing loading recommendation.

(2) At Terminations. A cable containing four or fewer conductors, sized not larger than No. 10, shall be secured within 12 inches (305 mm) of every box, cabinet, fitting, or other cable termination.

(3) A clearance of at least 6 inches shall be maintained between Type MC cable and other piping systems.

(4) Cables shall not be supported by pipes, ducts, ceiling assemblies, light fixtures or the support wires of a light fixture, or above other ceiling utilization equipment not intended for cable support.

(5) Type MC cable may only be supported by fasteners or clamps that are approved and UL listed for cable support.

(6) All cables passing through fire-rated assemblies shall be provided with a UL listed fire inhibiting assembly intended for cable penetrations equal to the rating of the wall.

(C)[~~(B)~~] **Unsupported Cables.** Type MC cable is not required to be supported and secured where the cable is fished between access points, where concealed in a finished building or structure and supporting is impracticable, or where used in a length not more than 6 feet (1.83 m) from an outlet for a connection within an accessible ceiling to a lighting fixture or equipment.

(D)[~~(C)~~] **Cable Tray.** Type MC cable installed in cable tray shall comply with Article 392 (*Cable Trays*).

(E)[~~(D)~~] **Direct Buried.** Direct-buried cable shall comply with Section 300.50 (*Underground Installations*).

(F)[~~(E)~~] **Installed Outside of Buildings or as Aerial Cable.** Type MC cable installed outside of a building or as aerial cable shall comply with Article 225 (*Outside Branch Circuits and Feeders*) and Section 330.10 (*Uses Permitted*).

(G)[~~(F)~~] **Through or Parallel to Joists, Studs, or Rafters.** Type MC cable shall comply with Section 300.4 (*Protection Against Physical Damage*) where installed through or parallel to a joist, stud, rafter, or similar wood or metal members.

(H)[~~(G)~~] **In Accessible Attics.** The installation of Type MC cable in an accessible attic or roof space shall also comply with Section 320.23 (*In Accessible Attics*).

(I) **Type MC Conductor Notes.**

1. All horizontal type MC feeders (including but not limited to unit load centers feeders, house panel feeders, etc.) shall be neatly supported by kindorf channel, mounted at the ceiling or as high as possible, and protected from physical damage. Kindorf channel shall be suspended from a ceiling in accordance with manufacturer loading recommendations. See Section 330.30(B)(1)(c).

2. The cable shall be installed in a neat, orderly and workmanlike manner. Cable shall not cross, be routed diagonally through the

building or have excess slack. Vertical runs shall be plumb. Horizontal runs must be level and parallel with structure. See Section 330.30(A).

3. If more than three cables are required in an exposed location, the cables shall be racked together and uniformly spaced in parallel runs supported by steel channels. Channels shall be designed and UL listed for the application. Cables shall be fastened to the channels with metal cable clamps designed for the particular channels used. See Section 330.30(B)(1)b.

4. A clearance of at least 6 inches shall be maintained between Type MC cable and other piping systems. See Section 330.30(B)(3).

5. Cables shall not be supported by pipes, ducts, ceiling assemblies, light fixtures or support wires of a light fixture, or above other ceiling utilization equipment not intended for cable support. See Section 330.30(B)(4).

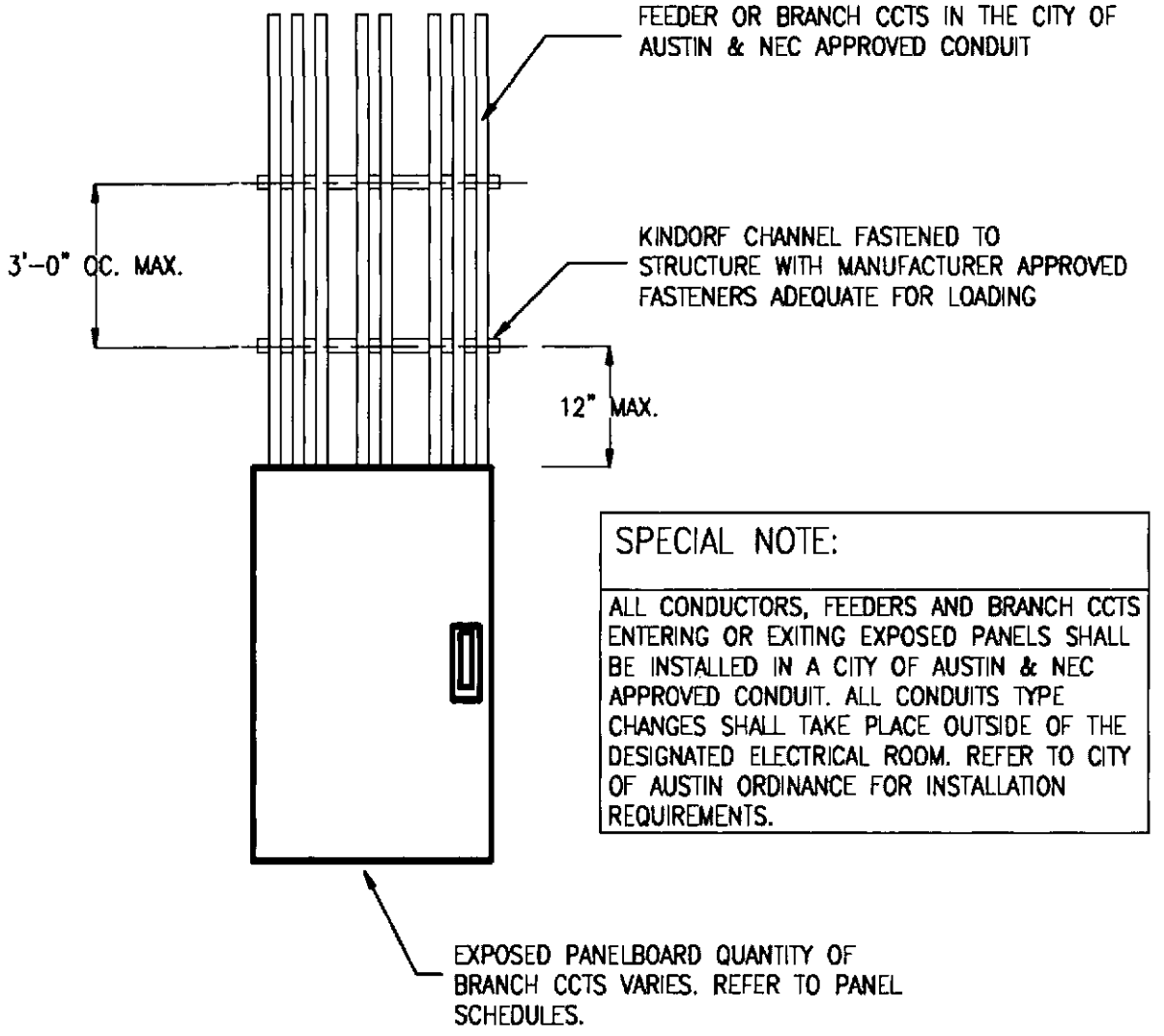
6. Cables shall be supported and secured at intervals not exceeding 6'-0" where concealed, 3'-0" where exposed and within 12" on connection to any panelboard or terminal / junction box. Cables shall be supported immediately before and after every vertical and horizontal bend and in the middle of every horizontal bend. See Section 330.30(B).

7. Only fasteners or clamps that are approved and UL listed for cable support are allowed. See Section 330.30(B)(5).

8. All cables passing through a fire-rated assembly shall be provided with a UL listed fire inhibiting assembly intended for cable penetrations equal to the rating of the wall. See Section 330.30(B)(6).

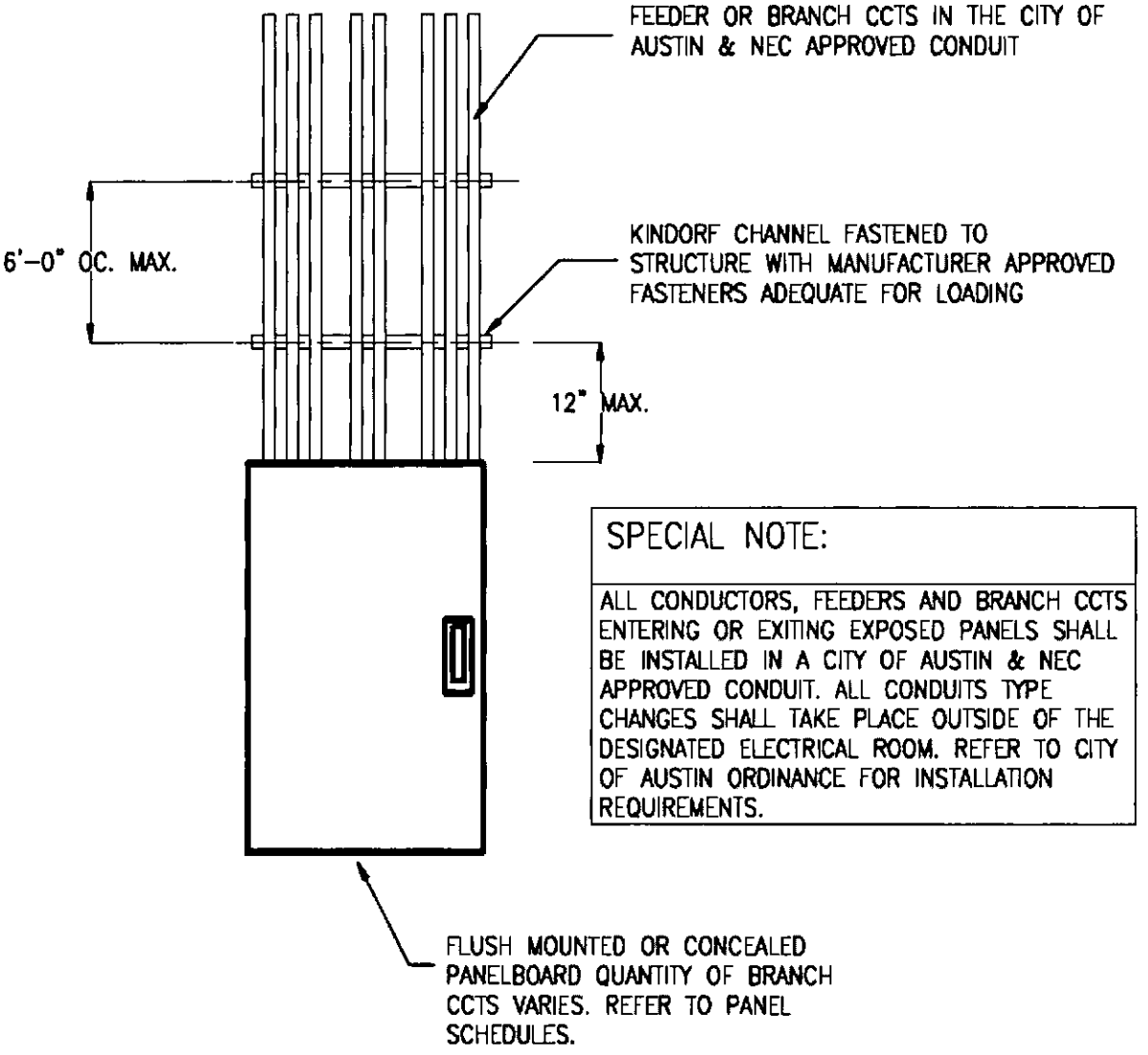
9. The building official must approve a proposed alternate method of compliance for a provision of this subsection or Figures 1 through 7. See Section 330.30.

FIGURE 1 – STRAPPING REQUIREMENTS FOR COMMERCIAL INSTALLATIONS EXPOSED PANELBOARD



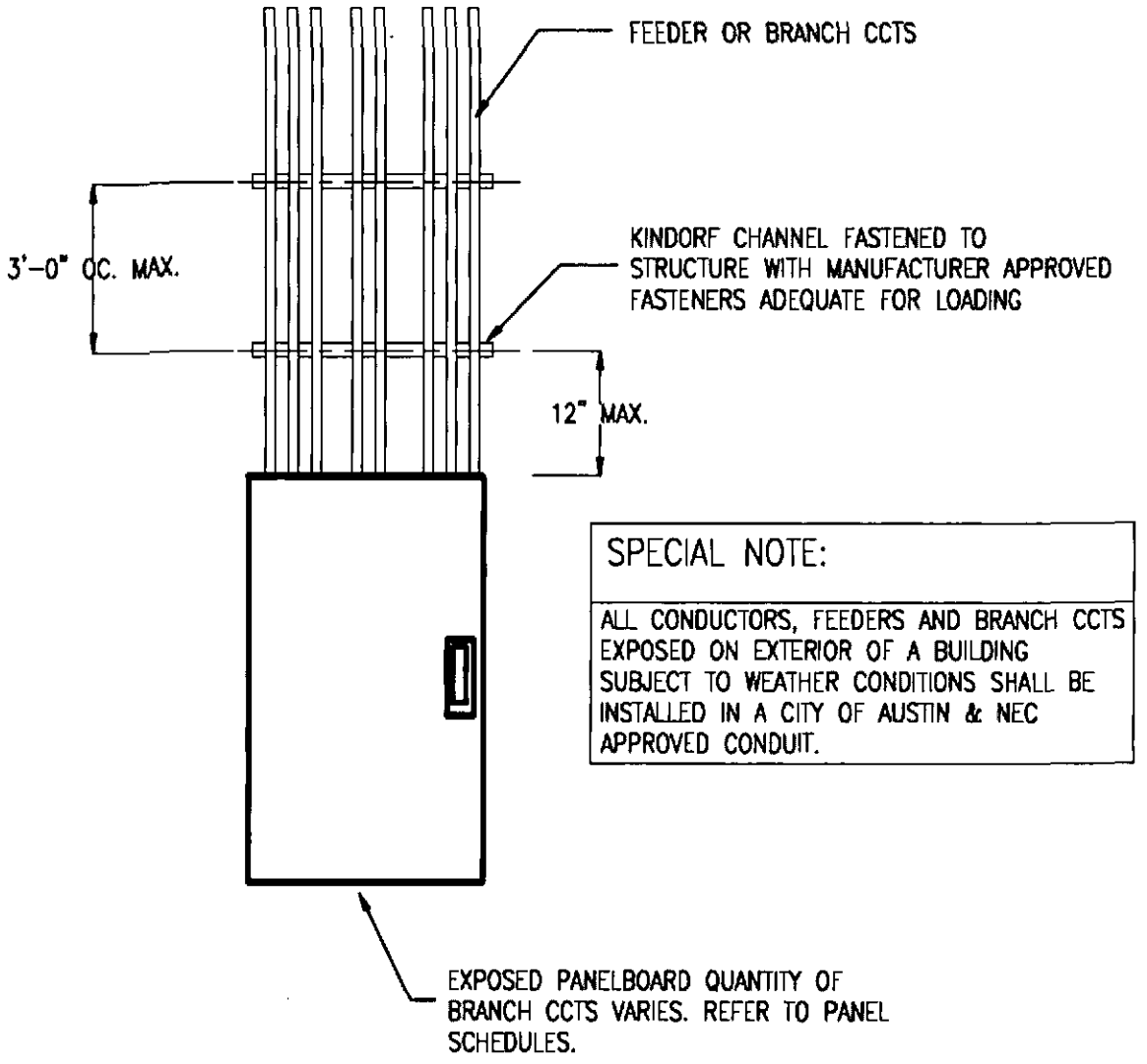
NOT TO SCALE

FIGURE 2 – STRAPPING REQUIREMENTS FOR COMMERCIAL INSTALLATIONS FLUSH MOUNTED OR CONCEALED PANELBOARD



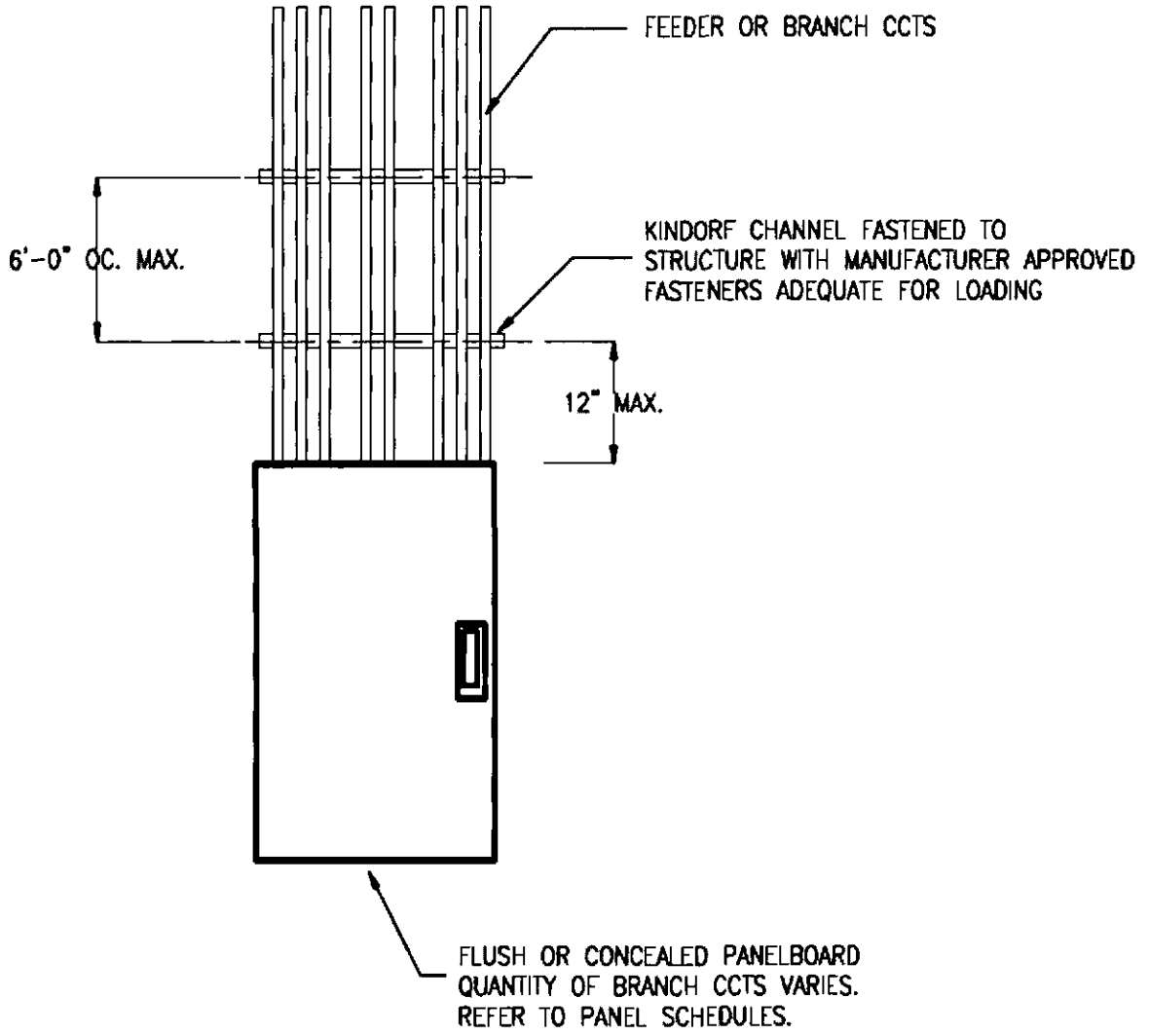
NOT TO SCALE

FIGURE 3 – STRAPPING REQUIREMENTS AND PANEL ENTRY/EXIT DETAIL FOR RESIDENTIAL AREAS OF MIXED-USE INSTALLATIONS EXPOSED PANEL BOARD



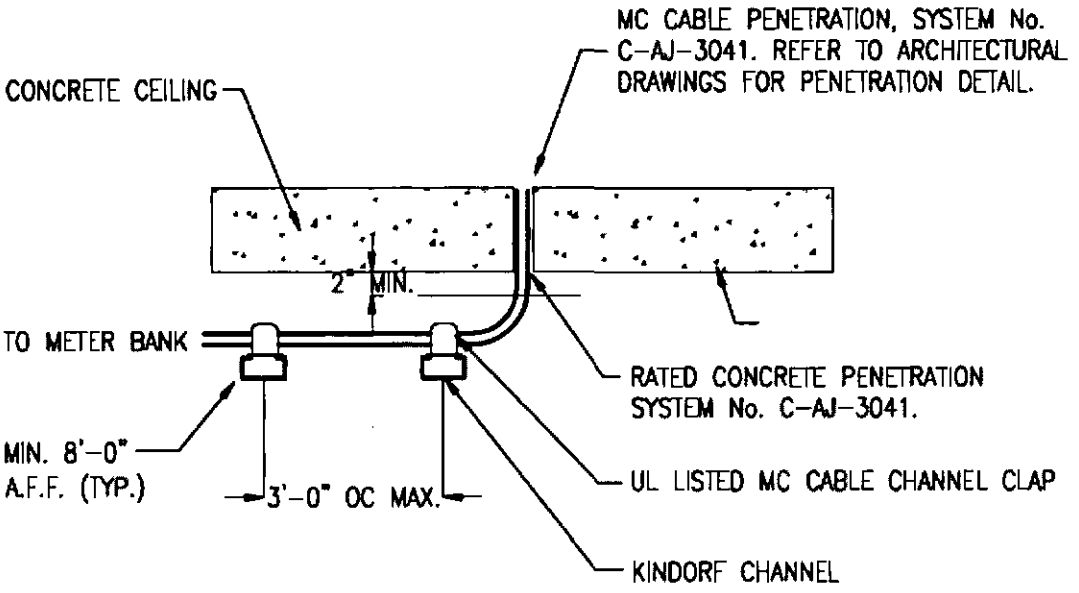
NOT TO SCALE

FIGURE 4 – STRAPPING REQUIREMENTS AND PANEL ENTRY/EXIT DETAIL FOR RESIDENTIAL AREAS OF MIXED-USE INSTALLATIONS FLUSH OR CONCEALED PANELBOARD



NOT TO SCALE

FIGURE 5 – RESIDENTIAL & MIXED-USE INSTALLATIONS
FEEDER DETAILS – EXPOSED GARAGE



NOT TO SCALE

FIGURE 6 – MODULAR METER BANK FEEDER DETAIL FOR RESIDENTIAL AREAS OF MIXED-USE INSTALLATIONS

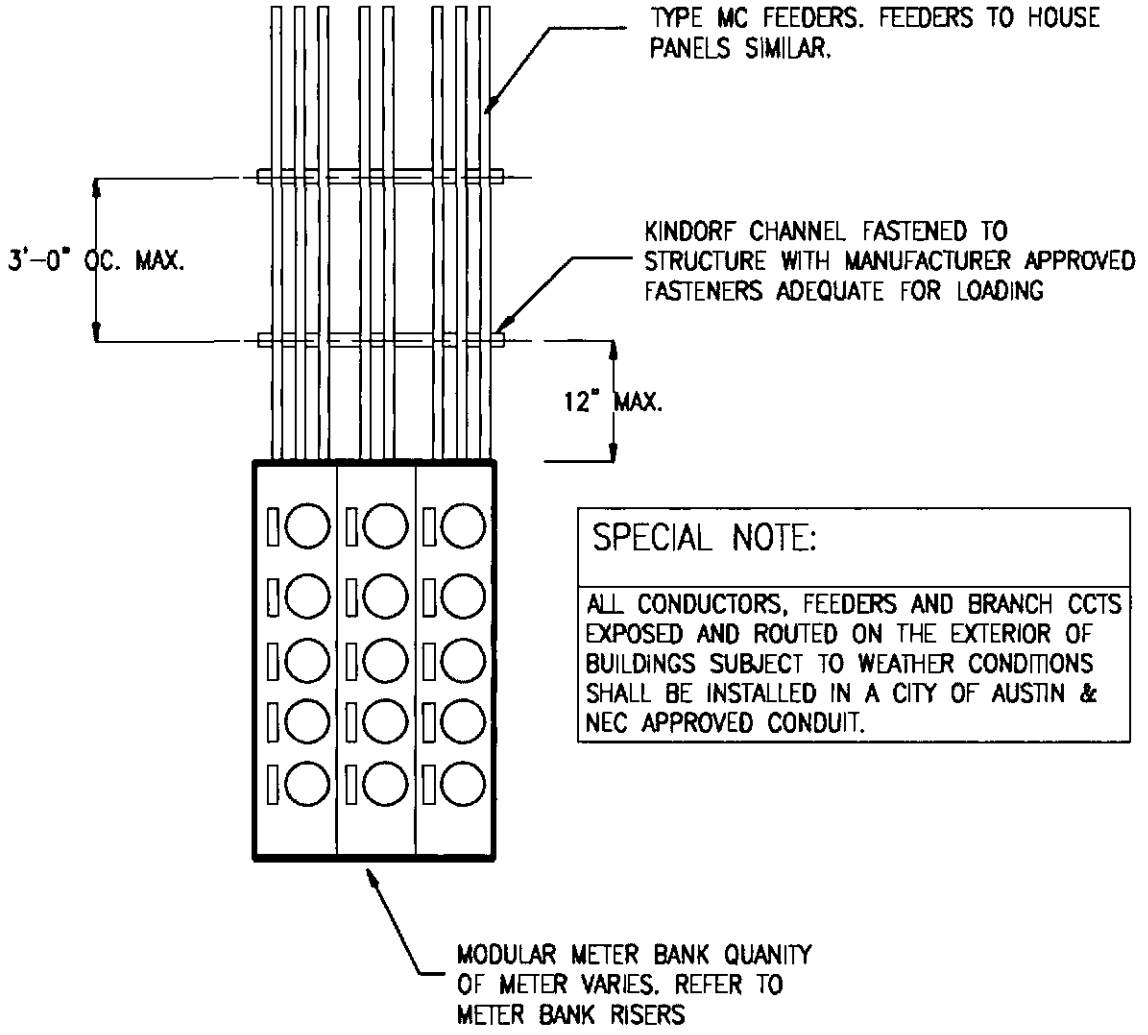


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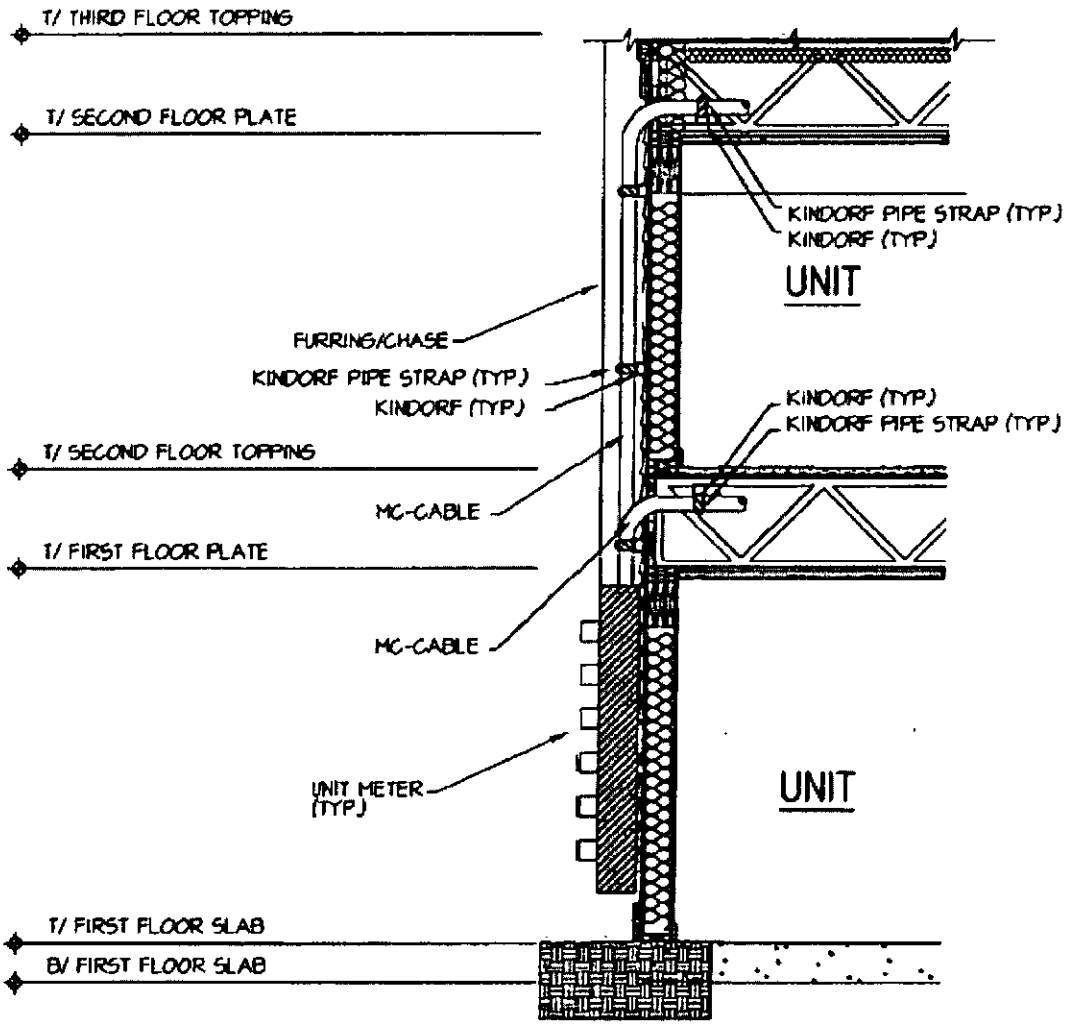
FIGURE 7 - RESIDENTIAL AREAS OF MIXED-USE INSTALLATIONS DETAIL FOR FEEDERS BETWEEN FLOORS



NOT TO SCALE

Notes:

All vertical and horizontal type MC feeders (including but not limited to unit load center feeders, house panel feeders, etc.) shall be neatly racked and supported at intervals not exceeding 6'-0" (refer to detail).

PART 4. This ordinance takes effect on January 1, 2008.

PASSED AND APPROVED

October 18, 2007

§
§
§ Betty Dunkerley for
Will Wynn
Mayor

APPROVED: _____
David Allan Smith
City Attorney

ATTEST: Shirley A. Gentry
Shirley A. Gentry
City Clerk