



City of Columbus  
Mayor Michael B. Coleman

## Department of Development

### Building Services Division

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***(Revised 9/17/09)***

## **Construction Industry Communication # 18**

**From: Keith Wagenknecht, Chief Building Official**

**Re: Installation of Electrical Boxes in Rated Floor/Ceiling Assemblies**

**Requirements:** 2007 Ohio Building Code Section 712.4.1.2 exception #2: Ceiling membrane penetrations of fire-resistant-rated assemblies (2 hour maximum) are permitted by steel electrical boxes that do not exceed 16 square inches in area provided that the aggregate area of such penetrations does not exceed 100 square inches.

2007 Ohio Building Code Section 712.4.1.2 exception #3: Membrane penetrations of fire-resistant-rated assemblies by listed electrical boxes of any material are permitted provided that such boxes have been tested for use in fire-resistant-rated assemblies and are installed in accordance with the instructions included in the listing.

**Background:** The City of Columbus has historically accepted membrane penetrations by both steel and non-metallic electrical boxes concurrently in the same horizontal fire-resistant-rated assemblies provided that the material of each box individually complied with their specific listing requirements.

**Memorandum:** The City of Columbus shall approve the installation of steel electrical boxes in horizontal fire-resistant-rated assemblies in compliance with Exception #2 Section 712.4.1.2 provided the maximum allowable area(s) identified by this section are followed.

The City of Columbus shall approve the installation of electrical boxes (of any material) in compliance with Exception #3 Section 712.4.1.2 provided such boxes have been tested for use in these assemblies and are installed in accordance with the instructions included in their specific listing.

The City of Columbus shall approve the installation of electrical boxes of differing material with contradictory listing installation instructions concurrently in the same horizontal fire-resistant-rated assembly provided that the most restrictive of these requirements are adhered to.

For additional information, please contact: Keith Wagenknecht, 614-645-6416.