



PLANNING AND DEVELOPMENT SERVICES

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Planning and Development Services Building Division Policy

Title: Protection of Openings and Penetrations Field Inspection Policy

Code Name: 2017 *Idaho State Plumbing Code (ISPC)*
2018 *International Mechanical Code (IMC)*
2023 *National Electrical Code (NEC)*
2018 *International Building Code (IBC)*

Code Sections: (ISPC) 312.7, 701.2(2), 1401.1; (IMC) 302.2; (NEC) 300.21; (IBC) 1705.17

Code Language:

- **(ISPC 312.7) Fire-Resistant Construction.** Piping penetrations of fire-resistance-rated walls, partitions, floors, floor/ceiling assemblies, roof/ceiling assemblies, or shaft enclosures shall be protected in accordance with the requirements of the building code and Chapter 14, "Firestop Protection."
- **(ISPC 701.2(2)) Drainage Piping.** ABS and PVC DWV piping installations shall be installed in accordance with applicable standards referenced in Table 1701.1 and Chapter 14 "Firestop Protection".
- **(ISPC 1401.1) Applicability.** Piping penetrations of required fire-resistance-rated walls, partitions, floors, floor/ceiling assemblies, roof/ceiling assemblies, or shaft enclosures shall be protected in accordance with the requirements of the building code, and this chapter.
- **(IMC 302.2) Penetrations of floor/ceiling assemblies and fire-resistance rated assemblies.** Penetrations of floor/ceiling assemblies and assemblies required to have a fire-resistance rating shall be protected in accordance with Chapter 7 of the *International Building Code*.
- **(NEC 300.21) Spread of Fire or Products of Combustion.** Electrical installations in hollow spaces, vertical shafts, and ventilation or air-handling ducts shall be made so that the possible spread of fire or products of combustion will not be substantially increased. Openings around electrical penetrations into or through fire-resistant-rated walls, partitions, floors, or ceilings shall be fire stopped using approved methods to maintain the fire resistance rating.
- **(IBC 1705.17) Fire-resistant penetrations and joints.** In high-rise buildings or in buildings assigned to Risk Category III or IV, special inspections for through-penetrations, membrane penetration firestops, fire-resistant joint systems, and perimeter fire barrier systems that are tested and listed in accordance with sections 714.4.1.2, 714.5.1.2, 715.3 and 715.4 shall be in accordance with Section 1705.17.1 or 1705.17.2.

Scope of Policy: This policy outlines field inspection protocol in new and existing construction that has through-penetrations, membrane penetrations or opening protection requirements for fire or smoke rated walls, ceilings, floor-ceiling assemblies and other building systems.

Policy: Where a building permit is issued, the through penetrations, membrane penetrations and opening protection of fire or smoke rated walls, ceilings, or floor-ceiling assemblies for plumbing piping and mechanical ducting and electrical installations will be verified by the building structural inspector or a special inspector specifically contracted under IBC section 1705.17, as applicable. Dampers in HVAC installations will be inspected in accordance with the Mechanical section *Smoke & Combination Fire/Smoke Damper Field Inspection Policy*.

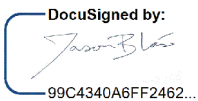
In cases where trade permitted work occurs in **high-rise** buildings, or **buildings** assigned to **Risk Category III or IV**, where no building permit is issued, and new or modifications to existing through-penetrations, membrane penetration firestops, fire-resistant joint systems, or where penetration of perimeter fire barrier systems has occurred, a building structural field inspector will be required to determine whether or not a qualified special inspector is needed to approve the new work being performed. In this scenario, an MIS case will be requested to be created by the trade permit inspector notifying a building structural field inspector to perform this evaluation.

In all other buildings where no building permit is issued (i.e. equipment change outs, minor ducting, piping, or electrical installations) it will be the trade permit inspector's responsibility and discretion to either approve minor cases of a modified fire rated assembly with protection of through-penetrations, membrane penetrations or openings; or determine if it will require an additional field inspection by the building structural field inspector. In the latter case, an MIS case will be requested to be created by the trade permit inspector notifying a building structural field inspector to perform this additional inspection to verify the integrity of any through penetrations, membrane penetrations, or opening protection of fire or smoke rated walls, ceilings and floor-ceiling assembly reconstruction.

In any existing building, if a structural modification to a wall, ceiling, floor-ceiling or roof assembly is necessary to accommodate trade permitted work, a separate building permit will be required.

Intent: On occasion, stand-alone trade permitted work can result in building modifications that compromise fire and/or smoke rated walls, ceilings, or floor-ceiling assembly construction. The trade inspector will need to use discretion and determine if they can approve the work in minor cases, or if it will need to escalate requiring inspection by building inspection personnel, or a special inspector possessing additional expertise in evaluating proper penetration and opening protection.

This policy is intended to provide guidance for City field inspection personnel to determine who is responsible for approval of through-penetration, membrane penetration, and opening protection in fire or smoke rated walls, ceilings or floor-ceiling assemblies in new and existing construction, depending on the parameters outlined above and the actual scope of work permitted. This policy updates a previous version of this policy dated 8/1/19 with updated codes, some section references, and minor language changes.

DocuSigned by:

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Jason Blais
Building Official

8/31/2026

Effective Date

Retired Date