

Firestopping as Required by Building & Safety Codes

Firestopping is well defined in the major building and safety codes. This is designed as a reference chart that assists users in quickly finding the relevant code requirement. It is not intended to take the place of the code. Always refer to the individual building or safety code.

When in doubt, verify requirements with the local authority having jurisdiction.

International Building Code (IBC); 2024 Edition		NFPA 101, "Life Safety Code"; 2024 Edition	
202 Definitions	Chapter 2 (Section 202) defines firestops and other relevant terms.	8.3.4.1.1 Penetrations	States where penetration requirements are defined.
714.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies to be firestopped. Points to 717 for damper requirements.	8.3.4.2.1 Firestop Systems and Devices Required	States that firestop systems are required.
714.3 Sleeves (Installation Details)	Requires sleeves to be fastened and sealed internally and externally.	8.3.4.2.2 Testing	Firestop systems shall be tested to ASTM E814 or ANSI/UL 1479.
		8.3.4.2.3 F Ratings	F Rating must match barrier.
714.4.1.2 Through Penetration Firestop	States that firestop systems are required in walls and shall be tested to ASTM E814 or ANSI/UL1479 for F Rating.	8.3.4.2.4 T Ratings	T Rating required in floors. Exceptions for wall cavity and no contact with combustibles.
714.4.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.4.3 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
714.4.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.4 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
714.5.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity, drain pipe contained in concealed horizontal space, max 4 inch diameter penetrations into metal-enclosed switchgear, or max 6 inch diameter penetrations in concrete floors (area of opening cannot exceed 144 square inches for penetrant passing through multiple floors).	8.3.4.6.1 Dissimilar Material	Prohibits connections beyond the point of firestopping in walls or floors of noncombustible and combustible piping unless tested.
714.5.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.4.7.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
714.5.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.7.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
714.5.4 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.4.7.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
715.2 Installation (Joints)	States joint systems must be securely installed (see also 715.2.1).	8.3.5 and 8.3.5.1 Joints	Defines requirements for joints.
715.3 Fire-Resistance-Rated Assembly Intersections	States joints need to be firestopped.	8.3.5.2.2 Joints and Smoke	States that joint shall limit smoke transfer.
715.3.1 Fire Test Criteria (Joints)	States joints shall be tested to ASTM E1966 or UL2079.	8.3.5.2.4 Representative Joints	Joints shall be typical of actual condition.
715.4 Exterior Curtain Wall/Fire-Resistance-Rated Floor Intersections	States voids at intersection of exterior curtain wall assemblies and fire-resistance-rated floor or floor/ceiling assemblies need to be firestopped with an approved perimeter fire containment system.	8.3.5.2.5 Joints & Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
715.4.1 Fire Test Criteria (Curtain Walls)	States perimeter fire containment systems shall be tested to ASTM E2307. Exception allowed for vision glass extending to finished floor level.	8.3.5.2.6 Joint & Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
715.6 Fire Barrier/Nonfire-Resistance-Rated Roof Assembly Intersections	States joints between fire-resistance-rated wall assembly and nonfire-resistance rated roof, slab or deck above must be protected with approved continuity head-of-wall system tested to ASTM E2837.	8.3.5.4.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
715.8 Curtain Wall Spandrels	Pointer to spandrel height requirements in 705.9.5.	8.3.5.4.2 Curtain Wall	Requires F Rating of perimeter joint system to match floor rating.
715.9 Joints and Voids in Smoke Barriers	Outlines L Rating requirements for joints and perimeter fire containment systems in smoke barriers.	8.4.4 and 8.4.4.1 Penetrations in Smoke Partitions	Requires penetrations in smoke partitions to limit smoke transfer. No specific value mandated.
		8.4.5 and 8.4.5.1 Joints and Smoke Partitions	Discusses joints in or between smoke partitions and requires them to limit smoke transfer.
		A.8.3.4.2 Inspections – Penetrations	References ASTM E2174 inspection standard.

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International Building Code (IBC); 2021 Edition		NFPA 101, "Life Safety Code"; 2021 Edition	
202 Definitions	Chapter 2 (Section 202) defines firestops and other relevant terms.	8.3.4.1.1 Penetrations	States where penetration requirements are defined.
714.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies to be firestopped. Points to 717 for damper requirements.	8.3.4.2.1 Firestop Systems and Devices Required	States that firestop systems are required.
714.3 Installation Details	Requires sleeves to be fastened and sealed internally and externally.	8.3.4.2.2 Testing	Firestop systems shall be tested to ASTM E814 or ANSI/UL 1479.
714.4.1.2 Through Penetration Firestop	States that firestop systems are required in walls and shall be tested to ASTM E814 or ANSI/UL1479 for F Rating.	8.3.4.2.3 F Ratings	F Rating must match barrier.
714.4.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.4.2.4 T Ratings	T Rating required in floors. Exceptions for wall cavity and no contact with combustibles.
714.4.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.3 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
714.5.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity, drain pipe contained in concealed horizontal space, or max 4 inch diameter penetrations into metal-enclosed switchgear.	8.3.4.4 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
714.5.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.4.6.1 Dissimilar Material	Prohibits connections beyond the point of firestopping in walls or floors of noncombustible and combustible piping unless tested.
714.5.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.7.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
714.5.4 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.4.7.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
715.2 Installation (Joints)	States joint systems must be securely installed.	8.3.4.7.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
715.3 Fire-Resistance-Rated Assembly Intersections	States joints need to be firestopped.	8.3.5 and 8.3.5.1 Joints	Defines requirements for joints.
		8.3.5.2.2 Joints and Smoke	States that joint shall limit smoke transfer.
		8.3.5.2.4 Representative Joints	Joints shall be typical of actual condition.
715.3.1 Fire Test Criteria (Joints)	States joints shall be tested to ASTM E1966 or UL2079.	8.3.5.2.5 Joints & Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
715.4 Exterior Curtain Wall/ Fire-Resistance-Rated Floor Intersections	States voids at intersection of exterior curtain wall assemblies and fire-resistance-rated floor or floor/ceiling assemblies need to be firestopped with an approved perimeter fire containment system.	8.3.5.2.6 Joint & Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
715.4.1 Fire Test Criteria (Curtain Walls)	States perimeter fire containment systems shall be tested to ASTM E2307. Exception allowed for vision glass extending to finished floor level.	8.3.5.4.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
715.7 Curtain Wall Spandrels	Pointer to spandrel height requirements in 705.8.5.	8.3.5.4.2 Curtain Wall	Requires F Rating of perimeter joint system to match floor rating.
715.8 Joints and Voids in Smoke Barriers	Outlines L Rating requirements for joints and perimeter fire containment systems in smoke barriers.	8.4.4 and 8.4.4.1 Penetrations in Smoke Partitions	Requires penetrations in smoke partitions to limit smoke transfer. No specific value mandated.
		8.4.5 and 8.4.5.1 Joints and Smoke Partitions	Discusses joints in or between smoke partitions and requires them to limit smoke transfer.
		A.8.3.4.2 Inspections – Penetrations	References ASTM E2174 inspection standard.

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International Building Code (IBC); 2018 Edition		NFPA 101, "Life Safety Code"; 2018 Edition	
202 Definitions	Chapter 2 (Section 202) defines firestops and other relevant terms.	8.3.4.1.1 Penetrations	States where penetration requirements are defined.
714.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies to be firestopped. Points to 717 for damper requirements.	8.3.4.2.1 Firestop Systems and Devices Required	States that firestop systems are required.
714.3 Installation Details	Requires sleeves to be fastened and sealed internally and externally.	8.3.4.2.2 Testing	Firestop systems shall be tested to ASTM E814 or ANSI/UL 1479.
714.4.1.2 Through Penetration Firestop	States that firestop systems are required in walls and shall be tested to ASTM E814 or ANSI/UL1479 for F Rating.	8.3.4.2.3 F Ratings	F Rating must match barrier.
714.4.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.4.2.4 T Ratings	T Rating required in floors. Exceptions for wall cavity and no contact with combustibles.
714.4.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.3 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
714.5.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity, drain pipe contained in concealed horizontal space, or max 4 inch diameter penetrations into metal-enclosed switchgear.	8.3.4.4 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
714.5.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.4.6.1 Dissimilar Material	Requires combustible pipe to noncombustible pipe transitions to occur 36" away unless tested.
714.5.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.4.7.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
714.5.4 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.4.7.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
715.1 Joints	States joints need to be firestopped.	8.3.4.7.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
715.2 Installation (Joints)	States joint systems must be securely installed.	8.3.5 and 8.3.5.1 Joints	Defines requirements for joints.
715.3 Fire Test Criteria (Joints)	States joints shall be tested to ASTM E1966 or UL2079.	8.3.5.2.2 Joints and Smoke	States that joint shall limit smoke transfer.
715.4 Curtain Wall	States slab edge systems shall be tested to ASTM E2307. Exception allowed for vision glass extending to finished floor level.	8.3.5.2.4 Representative Joints	Joints shall be typical of actual condition.
715.5 Spandrel Wall	Pointer to spandrel height requirements in 705.8.5.	8.3.5.2.5 Joints & Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
715.6 Joints (Smoke Barriers)	Outlines L Rating requirements for joints in smoke barriers.	8.3.5.2.6 Joint & Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
		8.3.5.4.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
		8.3.5.4.2 Curtain Wall	Requires F Rating of perimeter joint system to match floor rating.
		8.4.4 and 8.4.4.1 Penetrations in Smoke Partitions	Requires penetrations in smoke partitions to limit smoke transfer. No specific value mandated.
		8.4.5 and 8.4.5.1 Joints and Smoke Partitions	Discusses joints in or between smoke partitions and requires them to limit smoke transfer.
		A.8.3.4.2 Inspections – Penetrations	References ASTM E2174 inspection standard.

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International Building Code (IBC); 2015 Edition		NFPA 101, "Life Safety Code"; 2015 Edition	
702 Definitions	Points to Chapter 2 (Section 202) to define firestopping and other relevant terms.	8.3.5 Penetrations	States where penetration requirements are defined.
714.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies to be firestopped. Points to 717 for damper requirements.	8.3.5.1 Firestop Systems and Devices Required	States that firestop systems are required and shall be tested to ASTM E814 or ANSI/UL1479.
714.2 Installation Details	Requires sleeves to be fastened and sealed internally and externally.	8.3.5.1.3 Penetrations	F Rating must match barrier.
714.3.1.2 Through Penetration Firestop	States that firestop systems are required in walls and shall be tested to ASTM E814 or ANSI/UL1479 for F Rating.	8.3.5.1.4 Penetrations	T Rating required in floors. Exceptions for wall cavity and no contact with combustibles.
714.3.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.5.2 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
714.3.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.3 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
714.4.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity, drain pipe contained in concealed horizontal space, or max 4 inch diameter penetrations into metal-enclosed switchgear.	8.3.5.5.1 Dissimilar Material	Requires combustible pipe to noncombustible pipe transitions to occur 36" away unless tested.
714.4.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.5.6.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
714.4.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.6.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
714.4.4 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.5.6.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
715.1 Joints	States joints need to be firestopped.	8.3.6 and 8.3.6.1 Joints	Defines requirements for joints.
715.2 Installation (Joints)	States joint systems must be securely installed.	8.3.6.2 Joints and Smoke	States that joint shall limit smoke transfer.
715.3 Fire Test Criteria (Joints)	States joints shall be tested to ASTM E1966 or UL2079.	8.3.6.3 Joints and Smoke	Another reference to smoke-tight joints.
715.4 Curtain Wall	States slab edge systems shall be tested to ASTM E2307. Exception allowed for vision glass extending to finished floor level.	8.3.6.4 Representative Joints	Joints shall be typical of actual condition.
715.5 Spandrel Wall	Pointer to spandrel height requirements in 705.8.5.	8.3.6.5 Joints and Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
715.6 Joints (Smoke Barriers)	Outlines L Rating requirements for joints in smoke barriers.	8.3.6.6 Joint and Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
		8.3.6.7.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
		8.3.6.7.2 Curtain Wall	Requires F Rating of perimeter joint system to match floor rating.
		8.4.4 and 8.4.4.1 Penetrations in Smoke Partitions	Requires penetrations in smoke partitions to limit smoke transfer. No specific value mandated.
		8.4.5 and 8.4.5.1 Joints and Smoke Partitions	Discusses joints in or between smoke partitions and requires them to limit smoke transfer.
		A.8.3.5.1 Inspections – Penetrations	References ASTM E2174 inspection standard.

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International Building Code (IBC); 2012 Edition		NFPA 101, "Life Safety Code"; 2012 Edition	
702 Definitions	Points to Chapter 2 (Section 202) to define firestopping and other relevant terms.	8.3.5 Penetrations	States where penetration requirements are defined.
714.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies to be firestopped. Points to 717 for damper requirements.	8.3.5.1 Firestop Systems and Devices Required	States that firestop systems are required and shall be tested to ASTM E814 or ANSI/UL1479.
714.2 Installation Details	Requires sleeves to be fastened and sealed internally and externally.	8.3.5.1.3 Penetrations	F Rating must match barrier.
714.3.1.2 Through Penetration Firestop	States that firestop systems are required in walls and shall be tested to ASTM E814 or ANSI/UL1479 for F Rating.	8.3.5.1.4 Penetrations	T Rating required in floors. Exceptions for wall cavity and no contact with combustibles.
714.3.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.5.2 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
714.3.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of non-combustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.3 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
714.4.1.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity or drain pipe contained in concealed horizontal space.	8.3.5.5.1 Dissimilar Material	Requires combustible pipe to noncombustible pipe transitions to occur 36" away unless tested.
714.4.1.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.5.6.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
714.4.1.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.6.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
714.5 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.5.6.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
715.1 Joints	States joints need to be firestopped.	8.3.6 and 8.3.6.1 Joints	Defines requirements for joints.
715.2 Installation (Joints)	States joint systems must be securely installed.	8.3.6.2 Joints and Smoke	States that joint shall limit smoke transfer.
715.3 Fire Test Criteria (Joints)	States joints shall be tested to ASTM E1966 or UL2079.	8.3.6.3 Joints and Smoke	Another reference to smoke-tight joints.
715.4 Curtain Wall	States slab edge systems shall be tested to ASTM E2307. Exception allowed for vision glass extending to finished floor level.	8.3.6.4 Representative joints	Joints shall be typical of actual condition.
715.5 Spandrel Wall	Pointer to spandrel height requirements in 705.8.5.	8.3.6.5 Joints and Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
715.6 Joints (Smoke Barriers)	Outlines L Rating requirements for joints in smoke barriers.	8.3.6.6 Joint and Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
		8.3.6.7.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
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713.1.1 Ducts	Requires ducts penetrating walls and horizontal assemblies (floor, floor/ceiling, etc.) to be firestopped. Points to 716 for damper requirements.	8.3.5.1 Firestop Systems and Devices Required	States that firestop systems are required and shall be tested to ASTM E814 or ANSI/UL1479.
713.2 Installation Details	Requires sleeves to be fastened and sealed internally and externally.	8.3.5.1.3 Penetrations	F Rating must match barrier.
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713.3.2 Membrane Penetrations	Membrane penetrations in walls treated as through penetrants. Outlines requirements for boxes.	8.3.5.2 Sleeves	Sleeves shall be securely installed and firestopped inside and out.
713.3.3 Dissimilar Materials	Prohibits connections beyond the point of firestopping in walls of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.3 Insulation and Coverings	Pipe covering shall terminate unless it can be properly firestopped.
713.4.1.1.2 Through Penetration Firestop	States that firestop systems are required in horizontal assemblies (floor, floor/ceiling, etc.) and shall be tested to ASTM E814 or ANSI/UL1479 for F&T Ratings. No T Rating required for penetrants inside wall cavity.	8.3.5.5.1 Dissimilar Material	Requires combustible pipe to noncombustible pipe transitions to occur 36" away unless tested.
713.4.1.2 Membrane Penetrations	Membrane penetrations in horizontal assemblies (floor, floor/ceiling, etc.) treated as through penetrants.	8.3.5.6.1 Membrane Penetrations	States membrane penetrations shall be protected by firestop system or device meeting the same requirements as through penetrations.
713.4.1.4 Dissimilar Materials	Prohibits connections beyond the point of firestopping in horizontal assemblies (floor, floor/ceiling, etc.) of noncombustible and combustible penetrants (pipes, etc.) unless tested.	8.3.5.6.2 Membrane Penetrations	States firestop systems for membrane penetrations shall be tested to ASTM E814 or ANSI/UL1479.
713.5 Smoke Barriers	Outlines L Rating requirements in smoke barriers, and requires L Rating tests. Allows air leakage rate of 50 CFM/100 square feet or 5 CFM/square foot.	8.3.5.6.3 Outlet Boxes	Allows outlet boxes. Dictates 24" separation, 100 sq in. per 100 sq ft, max 0.1 sq ft box. Allows firestop under Option D.
714.1 Joints	States joints must be firestopped.	8.3.6 and 8.3.6.1 Joints	Defines requirements for joints.
714.2 Installation (Joints)	States joint systems must be securely installed.	8.3.6.2 Joints and Smoke	States that joint shall limit smoke transfer.
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714.4 Curtain Wall	States slab edge systems shall be tested to ASTM E2307.	8.3.6.4 Representative Joints	Joints shall be typical of actual condition.
714.5 Spandrel Wall	Pointer to spandrel height requirements in 705.8.5.	8.3.6.5 Joints and Test Standards	Joints shall be tested to ASTM E1966 (UL2079).
714.6 Joints (Smoke Barriers)	Outlines L Rating requirements for joints in smoke barriers.	8.3.6.6 Joint and Test Standards	Joints shall be tested at fully extended width and subject to hose stream (walls only).
		8.3.6.7.1 Curtain Walls and Perimeter Joints	States slab edge systems shall be tested to ASTM E2307.
		8.3.6.7.2 Curtain Wall	Requires F Rating of perimeter joint system to match floor rating.
		8.4.4 & 8.4.4.1 Penetrations in Smoke Partitions	Requires penetrations in smoke partitions to limit smoke transfer. No specific value mandated.
		8.4.5 and 8.4.5.1 Joints and Smoke Partitions	Discusses joints in or between smoke partitions and requires them to limit smoke transfer.
		A.8.3.5.1 Inspections – Penetrations	References ASTM E2174 inspection standard.

Firestopping as Required by Building & Safety Codes

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National Building Code of Canada (2020 Edition)

Volume 1/Division A 1.4	Terms and Abbreviations.
Volume 1/Division B 3.1.8.3.2 and 3.1.8.3.3	Continuity of Fire Separations. Outlines requirements for joints to be firestopped with a system tested per CAN/ULC-S115.
Volume 1/Division B 3.1.8.3.4	Continuity of Fire Separations. Outlines requirements for joints between floor and exterior wall to be firestopped with a system tested per ASTM E2307.
Volume 1/Division B 3.1.9	Penetrations in Fire Separations and Fire-Rated Assemblies.
Volume 1/Division B 3.1.9.1	Firestops (for penetrations). Outlines requirements for membrane or through penetrants to be firestopped with a system tested per CAN/ULC-S115.
Volume 1/Division B 3.1.9.3	Penetrations by Outlet Boxes. Outlines requirements for metallic and nonmetallic outlet boxes.
Volume 1/Division B 3.1.9.4	Combustible Piping Penetrations. Defines requirements for 50 Pa testing per CAN/ULC-S115.
Volume 1/Division B APPENDIX D	Fire Performance Ratings and Document numbers for building materials.

National Building Code of Canada (2015 Edition)

Volume 1/Division A 1.4	Terms and Abbreviations.
Volume 1/Division B 3.1.9	Penetrations in Fire Separations and Fire-Rated Assemblies.
Volume 1/Division B 3.1.9.1	Fire Stops. Outlines requirements of tests per ULC-S115.
Volume 1/Division B 3.1.9.3 & 3.1.9.4	Penetrations by Wires, Cables and Outlet Boxes.
Volume 1/Division B 3.1.9.5	Combustible Piping Penetrations. Defines requirements for 50 Pa testing per ULC-S115.
Volume 1/Division B APPENDIX D	Fire Performance Ratings and Document numbers for building materials.

National Building Code of Canada (2010 Edition)

Volume 1/Division A 1.4	Terms and Abbreviations.
Volume 2/Division B 3.1.9	Penetrations in Fire Separations and Fire-Rated Assemblies.
Volume 2/Division B 3.1.9.1	Fire Stops. Outlines requirements of tests per ULC-S115.
Volume 2/Division B 3.1.9.3	Penetrations by Wires, Cables and Outlet Boxes.
Volume 2/Division B 3.1.9.4	Combustible Piping Penetrations. Defines requirements for 50 Pa testing per ULC-S115.
Volume 2/Division B APPENDIX D	Fire Performance Ratings and Document numbers for building materials.

National Building Code of Canada (2005 Edition)

Volume 1/Division A 1.4	Terms and Abbreviations.
Volume 1/Division B 3.1.9	Building Services in Fire Separations and Fire-Rated Assemblies.
Volume 1/Division B 3.1.9.1	Fire Stopping of Service Penetrations. Outlines requirements of tests per ULC-S115.
Volume 1/Division B 3.1.9.3	Penetrations by Wires, Cables and Outlet Boxes.
Volume 1/Division B 3.1.9.4	Combustible Pipe Penetrations. Defines requirements for 50 Pa testing per ULC-S115.
Volume 2/Division B APPENDIX D	Fire Performance Ratings and Document numbers for building materials.

Firestopping as Required by Building & Safety Codes

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NFPA 70 "National Electrical Code" (2026 Edition)		NFPA 70 "National Electrical Code" (2014 Edition)	
300.23 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.	300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.
720.21 Spread of Fire or Products of Combustion	Requires limited-energy systems to be firestopped.	760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.
720.21 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.	770.26 Spread of Fire or Products of Combustion	Requires openings for fiber optics and innerducts to be firestopped.
720.21 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.	800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.
720.21 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.	820.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.
760.4(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointers to 300.23 and 720.21.	830.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.
NFPA 70 "National Electrical Code" (2023 Edition)		NFPA 70 "National Electrical Code" (2011 Edition)	
300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.	300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.
760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.	760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.
770.26 Spread of Fire or Products of Combustion	Requires openings for fiber optics and innerducts to be firestopped.	770.26 Spread of Fire or Products of Combustion	Requires openings for fiber optics and innerducts to be firestopped.
800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.	800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.
800.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.	820.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.
800.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.	830.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.
NFPA 70 "National Electrical Code" (2020 Edition)		NFPA 70 "National Electrical Code" (2008 Edition)	
300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.	300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.
760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.	760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.
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800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.	800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.
800.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.	820.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.
800.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.	830.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.
NFPA 70 "National Electrical Code" (2017 Edition)			
300.21 Spread of Fire or Products of Combustion	Requires electrical installations to be firestopped.		
760.3(A) Spread of Fire or Products of Combustion	Requires fire alarm cables to be firestopped with pointer to 300.21.		
770.26 Spread of Fire or Products of Combustion	Requires openings for fiber optics and innerducts to be firestopped.		
800.26 Spread of Fire or Products of Combustion	Requires openings for communications cables to be firestopped.		
820.26 Spread of Fire or Products of Combustion	Requires openings for coaxial and CATV cables to be firestopped.		
830.26 Spread of Fire or Products of Combustion	Requires openings for network-powered broadband cables to be firestopped.		

Firestopping as Required by Building & Safety Codes

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International Fire Code (IFC); 2024 Edition			
701.2 Fire-resistance-rated construction	Requires maintenance of fire-resistance-rated construction including structural members, exterior walls, fire walls, fire barriers, fire partitions, horizontal assemblies and shaft enclosures.	703.1 Maintaining protection (Penetrations)	Materials and firestop systems for membrane and through penetrations shall be maintained. If system design number is known, system shall be inspected to listing criteria and manufacturer installation instructions.
701.3 Smoke barriers	Requires maintenance of fire-resistance rating and smoke-resistant characteristics of smoke barriers.	703.2 Repair of penetrations	Damaged materials used in the protection of membrane and through penetrations shall be replaced or restored with materials or systems meeting or exceeding code requirements applicable when assembly was constructed, remodeled or altered.
701.4 Smoke partitions	Requires maintenance of smoke-resistant characteristics of smoke partitions.	704.1 Maintaining protection (Joints and Voids)	Materials and systems for joint protection (including curtain wall locations) shall be maintained.
701.5 Maintaining protection	Requires maintenance of materials, systems and devices used to repair or protect openings in fire-resistance-rated construction and construction installed to resist the passage of smoke.	704.2 Repair of joints and voids	Damaged materials used in the protection of joints and voids shall be replaced or restored with materials or systems meeting or exceeding code requirements applicable when assembly was constructed rmodeled or altered.
701.6 Owner's responsibility	Requires owner to maintain inventory of fire-resistance-rated construction and construction installed to resist the passage of smoke. Annual visual inspections, repairs of damages, and records of inspections and repairs are required for such constructions.		
International Fire Code (IFC); 2021 Edition			
701.2 Fire-resistance-rated construction	Requires maintenance of fire-resistance-rated construction including structural members, exterior walls, fire walls, fire barriers, fire partitions, horizontal assemblies and shaft enclosures.	703.1 Maintaining protection (Penetrations)	Materials and firestop systems for membrane and through penetrations shall be maintained. If system design number is known, system shall be inspected to listing criteria and manufacturer installation instructions.
701.3 Smoke barriers	Requires maintenance of fire-resistance rating and smoke-resistant characteristics of smoke barriers.	703.2 Repair of penetrations	Damaged materials used in the protection of membrane and through penetrations shall be replaced or restored with materials or systems meeting or exceeding code requirements applicable when assembly was constructed, remodeled or altered.
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701.5 Maintaining protection	Requires maintenance of materials, systems and devices used to repair or protect openings in fire-resistance-rated construction and construction installed to resist the passage of smoke.	704.2 Repair of joints and voids	Damaged materials used in the protection of joints and voids shall be replaced or restored with materials or systems meeting or exceeding code requirements applicable when assembly was constructed rmodeled or altered.
701.6 Owner's responsibility	Requires owner to maintain inventory of fire-resistance-rated construction and construction installed to resist the passage of smoke. Annual visual inspections, repairs of damages, and records of inspections and repairs are required for such constructions.		

Firestopping as Required by Building & Safety Codes

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International Fire Code (IFC); 2018 Edition			
701.2 Fire-resistance-rated construction	Requires maintenance of fire-resistance-rated construction including structural members, exterior walls, fire walls, fire barriers, fire partitions, horizontal assemblies and shaft enclosures.	701.6 Owner's responsibility	Requires owner to maintain inventory of fire-resistance-rated construction and construction installed to resist the passage of smoke. Annual visual inspections, repairs of damages, and records of inspections and repairs are required for such constructions.
701.3 Smoke barriers	Requires maintenance of fire-resistance rating and smoke-resistant characteristics of smoke barriers.	703.1 Maintaining protection (Penetrations)	Materials and firestop systems for membrane and through penetrations shall be maintained. If system design number is known, system shall be inspected to listing criteria and manufacturer installation instructions.
701.4 Smoke partitions	Requires maintenance of smoke-resistant characteristics of smoke partitions.	704.1 Maintaining protection (Joints and Voids)	Materials and systems for joint protection (including curtain wall locations) shall be maintained.
701.5 Maintaining protection	Requires maintenance of materials, systems and devices used to repair or protect openings in fire-resistance-rated construction and construction installed to resist the passage of smoke.		
International Fire Code (IFC); 2015 Edition			
703.1 Maintenance	Requires maintenance of fire-rated construction, including firestops. Imposes strict requirements for annual inspection and repair/replacement. Requires records of inspections and repairs to be maintained.		
International Fire Code (IFC); 2012 Edition			
703.1 Maintenance	Requires maintenance of fire-rated construction, including firestops. Imposes strict requirements for annual inspection and repair/replacement.		
International Fire Code (IFC); 2009 Edition			
703.1 Maintenance	Requires maintenance of fire-rated construction, including firestops. Imposes strict requirements for annual inspection and repair/replacement.		