



Clark County Building Department

4701 West Russell Road, Las Vegas, NV 89118 ~ (702) 455-3000

Fireproofing for Steel Construction Building Permit Guide BPG-053

James Gerren, P.E., Director
Werner Hellmer, P.E., Deputy Director • Scott Telford, P.E., Deputy Director

Part I. General Information

This guide outlines fireproofing, and mastic and intumescent fire-resistant coatings submittal requirements for steel construction to ensure proper plan review and inspection.

Part II. Applicant's Responsibility

It shall be the applicant's responsibility to provide a completed application. The submittal and approval of the deferred items must occur prior to the installation of the specific element. Modifications to previously fireproofed members shall require submittal of an engineer's judgement addressing the compatibility of materials used and application instructions for the new fireproofing materials.

Part III. Prerequisites

- Fireproofing plans and supporting documents must be submitted with the structural plans and shall be prepared, signed and stamped by a Nevada registered architect or professional engineer (as applicable for the discipline involved). Only providing thickness tables from the manufacturer is insufficient and does not suffice as supporting documents.
- The Cover sheet must include a digital signature, seal, signature, and date of signing of the design professional. Subsequent sheets shall include the seal, signature, and date of signing.
- Deferred submittals are allowed, however, a note must be included in the construction documents prepared by the design professional(s) indicating the deferred items and must be approved by the Building Department prior to the issuance of the building permit. Deferred submittals are uploaded as revisions.

Part IV. Applicable Codes

Currently adopted:

- International Building Code (IBC)
- Southern Nevada Code Amendments.

Part V. Submittal Package

Consists of a complete set of drawings, drawn to scale (minimum 1/8" = 1'0") uploaded into the Citizens Access Portal.

Part VI. Plan Contents

In order to provide a complete review, the following submittal information is required:

- A complete building code analysis, prepared by the Design Professional of Record indicating the applicable code, type of construction, and fire-resistance rating requirements for all building elements.
- Each sheet signed/stamped and dated by the design professional.

- Structural framing backgrounds, drawn to scale, shall be used to indicate the required fireproofing (i.e., thickness of spray-applied fireproofing and/or hourly fire-resistance rating) for each member (e.g., W8x10 (5/8") and/or W8x10 (3-hours)).
- Fireproofing schedules that identify UL design numbers, W/D and/or A/P ratios, restraint conditions (restrained or unrestrained), required hourly fire-resistance ratings, type of concrete (normal weight or lightweight), and the minimum thicknesses of spray-applied fireproofing of intumescent fireproofing for each structural steel element applicable to the project. The fireproofing schedule shall be coordinated with the structural framing layout associated with the schedule. Color coding is encouraged.
- For W/D or A/P ratios of the structural member not specified in the UL spray-applied fireproofing thickness chart, provide a justification letter from the manufacturer to address that the proposed thickness of the spray-applied fireproofing material is appropriate. The justification letter should be signed by the manufacturer's representative.
- Provide manufacturer's thickness charts used for determining minimum thicknesses. The fireproofing thickness charts must be specific to the structural elements and listed designs used in the project.

Per IBC Section 703.2.1.3 Restrained Classification, fire-resistance-rated assemblies tested under ASTM E119 or UL 263 shall not be considered to be restrained unless evidence satisfactory to the Building Official is furnished by the registered design professional showing that the construction qualifies for a restrained classification in accordance with ASTM E119 or UL 263. Restrained construction shall be identified on the plans. If using the information (i.e., UL design numbers, W/D and/or A/P ratios, minimum thicknesses of fireproofing) provided by the manufacturer (i.e., W.R. Grace, Isolatek), include a note in the fireproofing plans indicating the name of the manufacturer being used. Generic, all-inclusive fireproofing schedules are not acceptable (i.e., only the structural members used in the project shall be included in the fireproofing schedule).

- Product-specific construction details required hourly rating(s), and approved, tested designs of gypsum wallboard assemblies used for required fire-resistance ratings of structural elements.
- Construction details for spray-applied fireproofing to be installed on open web trusses, plate girders (PG), and build-up columns.
- For deferred submittals, one (1) copy of the referenced structural plans must be included.
- Color-coded plans are preferred.
- Do not include manufacturer's specification and data sheets.

Part VII. Quality Assurance Agency (QAA) Special Inspections Agreement

- The owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under IBC Section 1704.2. Per IBC Section 1705.15 and Section 1705.16, special inspection is required for sprayed fire-resistant materials and mastic and intumescent fire-resistant coatings respectively.
- Special inspections shall be based on the fire-resistance design as designated in the approved construction documents.

Building Department Locations & Services

MAIN OFFICE 4701 W Russell Road Las Vegas, NV 89118 (702)455-3000	In Lobby Services: <ul style="list-style-type: none"> - Assistance with electronic permitting - In-person communications & meetings - Records research
LAUGHLIN OFFICE Regional Government Center 101 Civic Way Laughlin, NV 89029 (702)298-2436	Services: <ul style="list-style-type: none"> - Building Inspection Services - Fire Prevention Inspection Services

Other Clark County Departments/Divisions/Districts

Fire Prevention	4701 W Russell Road, Las Vegas, NV 89118	(702) 455-7100
Public Response Office	4701 W Russell Road, Las Vegas, NV 89118	(702) 455-4191
Animal Control	4701 W Russell Road, Las Vegas, NV 89118	(702) 455-7710
Environment & Sustainability	4701 W Russell Road, Las Vegas, NV 89118	(702) 455-5942
Public Works, Development Review	500 S Grand Central Pkwy, Las Vegas, NV 89155	(702) 455-4600
Comprehensive Planning	500 S Grand Central Pkwy, Las Vegas, NV 89155	(702) 455-4314
Las Vegas Valley Water District	1001 S Valley View Blvd, Las Vegas, NV 89153	(702) 870-2011
Southern Nevada Health District	280 S Decatur Blvd, Las Vegas, NV 89107	(702) 759-1000
Water Reclamation District	5857 E Flamingo Rd, Las Vegas, NV 89122	(702) 668-8888

State of Nevada

Division of Water Resources	400 Shadow Lane, Suite 201, Las Vegas, NV 89106	(702) 486-2770
Nevada State Contractors Board	8400 W Sunset Rd, Suite 150, Las Vegas, NV 89113	(702) 486-1100

Utilities

Nevada Energy	6226 W Sahara Ave, Las Vegas, NV 89146	(702) 402-5555
Southwest Gas	8360 S Durango Dr, Las Vegas, NV 89113	(877) 860-6020

www.clarkcountynv.gov/building