1

History

- Multiple engineering judgments (EJ) submitted unnecessarily
- EJs submitted when tested, listed, approved assemblies exist
- Several hours of review
- Several hours of work inputting AMCs to logbook
- $0 cost ACD-at the time
  - Current-Fees for;
    - ACD
    - AMC
    - $0 cost ACD
    - T & M (Time and Material)for AMC

2

Code

2013 CBC

SECTION 703

FIRE-RESISTANCE RATINGS AND FIRE TESTS

703.1 Scope. Materials prescribed herein for fire resistance shall conform to the requirements of this chapter.

703.2 Fire-resistance ratings. The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E 119 or UL 263 or in accordance with Section 703.3. Where materials, systems or devices that have not been tested as part of a fire-resistance-rated assembly are incorporated into the building element, component or assembly, sufficient data shall be made available to the building official to show that the required fire-resistance rating is not reduced. Materials and methods of construction used to protect joints and penetrations in fire-resistance-rated building elements, components or assemblies shall not reduce the required fire-resistance rating.

2016/2019 CBC

SECTION 703

FIRE-RESISTANCE RATINGS AND FIRE TESTS

703.1 Scope. Materials prescribed herein for fire resistance shall conform to the requirements of this chapter.

703.2 Fire-resistance ratings. The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E119 or UL 263 or in accordance with Section 703.3. The fire-resistance rating of penetrations and fire-resistant joint systems shall be determined in accordance Sections 714 and 715, respectively.

3

CAN 2-703.3 Engineering Judgments

- https://oshpd.ca.gov/construction-finance/codes-and-regulations/#CANs
- Revised 9/21/20

4

703.3

- **Methods for determining fire resistance.** The application of any of the methods listed in this section shall be based on the fire exposure and acceptance criteria specified in ASTM E119 or UL 263. The required fire resistance of a building element, component or assembly shall be permitted to be established by any of the following methods or procedures:

5

703.3

1. Fire-resistance designs documented in approved sources.
2. Prescriptive designs of fire-resistance-rated building elements, components or assemblies as prescribed in Section 721.
3. Calculations in accordance with Section 722.
4. Engineering analysis based on a comparison of building element, component or assemblies designs having fire-resistance ratings as determined by the test procedures set forth in ASTM E119 or UL 263.
5. Alternative protection methods as allowed by Section 104.11.
6. Fire-resistance designs certified by an approved agency.

6

Building Element Definition Chap 2

BUILDING ELEMENT.

A fundamental component of building construction, listed in Table 601, which may or may not be of fire-resistance-rated construction and is constructed of materials based on the building type of construction.

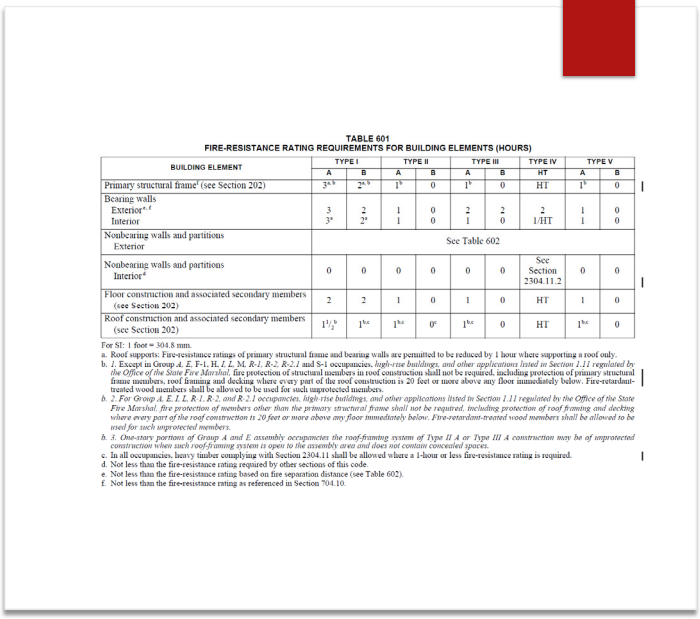


TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
	A	B	A	B	A	B	HT	A	B
Primary structural frame[d] (see Section 202)	3[a,b]	2[a,b]	1[b]	0	1[b]	0	HT	1[b]	0
Bearing walls Exterior[e,f] Interior	3 3[a]	2 2[a]	1 1	0 0	2 1	2 0	2 1/HT	1 1	0 0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior[d]	0	0	0	0	0	0	See Section 2304.11.2	0	0
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	HT	1	0
Roof construction and associated secondary members (see Section 202)	1½[b]	1[b,c]	1[b,c]	0[c]	1[b,c]	0	HT	1[b,c]	0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. *1.* Except in Group *A, E,* F-1, H, *I, L,* M, *R-1, R-2, R-2.1* and S-1 occupancies, *high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal*, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b. 2. For Group A, E, I, L, R-1, R-2, and R-2.1 occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, fire protection of members other than the primary structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b. 3. One-story portions of Group A and E assembly occupancies the roof-framing system of Type II A or Type III A construction may be of unprotected construction when such roof-framing system is open to the assembly area and does not contain concealed spaces.

c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. Not less than the fire-resistance rating required by other sections of this code.

e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

f. Not less than the fire-resistance rating as referenced in Section 704.10.

7

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
	A	B	A	B	A	B	HT	A	B
Primary structural frame[d] (see Section 202)	3[a,b]	2[a,b]	1[b]	0	1[b]	0	HT	1[b]	0
Bearing walls Exterior[e,f] Interior	3 3[a]	2 2[a]	1 1	0 0	2 1	2 0	2 1/HT	1 1	0 0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior[d]	0	0	0	0	0	0	See Section 2304.11.2	0	0
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	HT	1	0
Roof construction and associated secondary members (see Section 202)	1½[b]	1[b,c]	1[b,c]	0[c]	1[b,c]	0	HT	1[b,c]	0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. *1.* Except in Group *A, E,* F-1, H, *I, L,* M, *R-1, R-2, R-2.1* and S-1 occupancies, *high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal*, fire protection of structural members in roof construction shall not be required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b. 2. For Group A, E, I, L, R-1, R-2, and R-2.1 occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, fire protection of members other than the primary structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b. 3. One-story portions of Group A and E assembly occupancies the roof-framing system of Type II A or Type III A construction may be of unprotected construction when such roof-framing system is open to the assembly area and does not contain concealed spaces.

c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. Not less than the fire-resistance rating required by other sections of this code.

e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

f. Not less than the fire-resistance rating as referenced in Section 704.10.

703.3 #4

4. Engineering analysis based on a comparison of building element, component or assemblies designs having fire-resistance ratings as determined by the test procedures set forth in ASTM E119 or UL 263.

AMC?

8

703.3 #5

5. Alternative protection methods as allowed by Section 104.11.

(EJs based off any other test standard)

104.11 Alternative materials, design and methods of construction and equipment.

(104.11-Meant for new technologies not currently in the code. This was not meant for companies to use EJs based off assemblies tested and paid for by other companies.)

104.11.1 Research reports…

104.11.2 Tests…

CAC 7-104. Alternate method of compliance…

AMC?

9

Non-Building Elements

Joints

- Curtain Wall
- Head of Wall
- Etcetera

(Test procedures as set forth in-ASTM E1966/UL 2079, Smoke UL 2079)

(These are joints, they are between the assemblies and have their own tests. If not tested and listed then AMC Required.)

AMC?

10

Non-Building Elements

Penetrations

- Through Penetrations

(Test procedures as set forth in-ASTM E 814/UL 1479, Smoke UL 1479)

- Membrane Penetrations

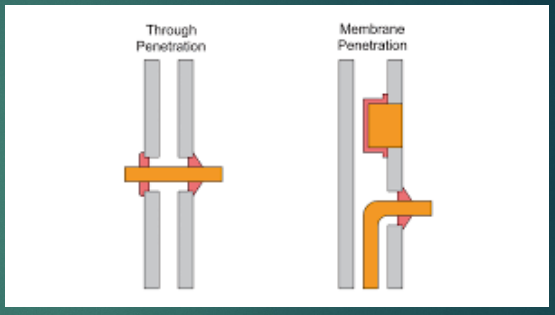
(Protected generally same as through)

- Etcetera

714.4.1.1 Fire-resistance-rated assemblies.

Through penetrations shall be protected using systems installed as tested in the approved fire-resistance-rated assembly. (If not tested in the assembly, AMC required.)

AMC?



11

Office/Field

Plan Review

- EJs and supporting documentation are required on the plans/construction documents.

Field

- An AMC approved by the Office after start of construction that constitutes a material change to approved construction documents shall be submitted to the Office in accordance with Title 24, Part 1, Section 7-153(a) "Changes in the Work" in the form of an Amended Construction Document (ACD). Multiple EJs that have been approved as AMCs may be submitted as a single ACD.

12

Summary

- AMC? 

- All EJs that are not in compliance with Item 4 of Section 703.3 shall be submitted for review and approval in accordance with Title 24, Part 1, Section 7-104 "Alternate Method of Compliance" (AMC).
- EJs submitted for penetrations and/or joint systems that do not have their own tested, listed system require an AMC.
- Other EJs submitted for non-building (601) elements that do not have their own tested, listed system require an AMC.

- AMC? 

- All EJs that are in compliance with Item 4 of Section 703.3 do not need an AMC (EJs based off test procedures set forth in ASTM E119/UL 263

13

Homework
Difficult or Creative…
You decide

14

UL and Intertek Sites

Intertek

- https://bpdirectory.intertek.com/pages/DLP_Search.aspx

UL

- https://iq.ulprospector.com/en

15

Fire-resistance Ratings - ANSI/UL 263

Guide Information for Fire-resistance Ratings

Design Information Section

The Design Information Section supplements the individual published designs and is organized as follows:

I. INTRODUCTION

1. Rapid-rise Fire Test
2. Definitions

II. GENERAL

1. Metric Dimensions
2. Loading of Test Specimens
3. Finish Ratings
4. Nails and Screws
5. Interior and Exterior Applications
6. Exposed Interior Finishes
7. Radiant Heating Cable and Panels
8. Coating Materials
9. Gypsum Board
10. Gypsum Board Joint Treatment (Taping)
11. Plaster
12. Dampers
13. Wood Structural Panels
14. Blanket Insulation
15. Sound Transmission Class (STC)
16. Impact Insulation Class (IIC)
17. Penetrations
18. Curtain Wall/Floor Protection Systems
19. Fire-resistant Joint Systems
20. Fire Doors, Frames and Hardware
21. Glazing, Wired Glass and Glass Blocks
22. Exterior Wall Systems

III. FLOOR-CEILINGS AND ROOF-CEILINGS

1. Concrete
2. Fiber Reinforcement
3. Steel Floor and Form Units
4. Electrical Boxes for Concrete Floors
5. Nonmetallic Outlet Boxes for Ceilings
6. Metallic Electrical Outlet Boxes
7. Steel Joists
8. Precast Concrete Units
9. Ceiling Control Joints
10. Acoustical Materials
11. Suspension Systems
12. Fluorescent Recessed Luminaires (Troffers)
13. Enclosures for Fluorescent Recessed Luminaires (Troffers)
14. Luminaires Certified for Fire Resistance
15. Restrained and Unrestrained Assemblies
16. Air Ducts and Protection Systems
17. Blanket Insulation
18. Wood Frame Construction
19. Roof Coverings
20. Roof Insulation
21. Uplift Resistance
22. Steel Roof Deck Fasteners
23. Steel Floor Unit Fasteners
24. Use of Floor-Ceilings as Roof-Ceilings

UL site and numbering https://iq.ulprospector.com/en/profile?e=206790

16


IV. BEAMS
1. Beam Size
2. Composite and Noncomposite Beams
3. Cavities
4. Beam Substitution
5. Unprotected Floors and Roofs
6. Adjustment of Thickness of Spray-applied Fire-resistive Materials for Restrained and Unrestrained Beams
7. Restrained and Unrestrained Conditions
V. COLUMNS
VI. WALLS AND PARTITIONS
1. Gypsum Board
2. Mineral Fiber Insulation
3. Wood Stud Wall Assemblies
4. Steel Stud Wall Assemblies
5. Metal Thickness
6. Wood Structural Panels
7. Gypsum Board Joint Treatment (Taping)
8. Nonmetallic Electrical Outlet Boxes
9. Metallic Electrical Outlet Boxes
10. Exterior Walls
11. Concrete Masonry Units
UL site and numbering
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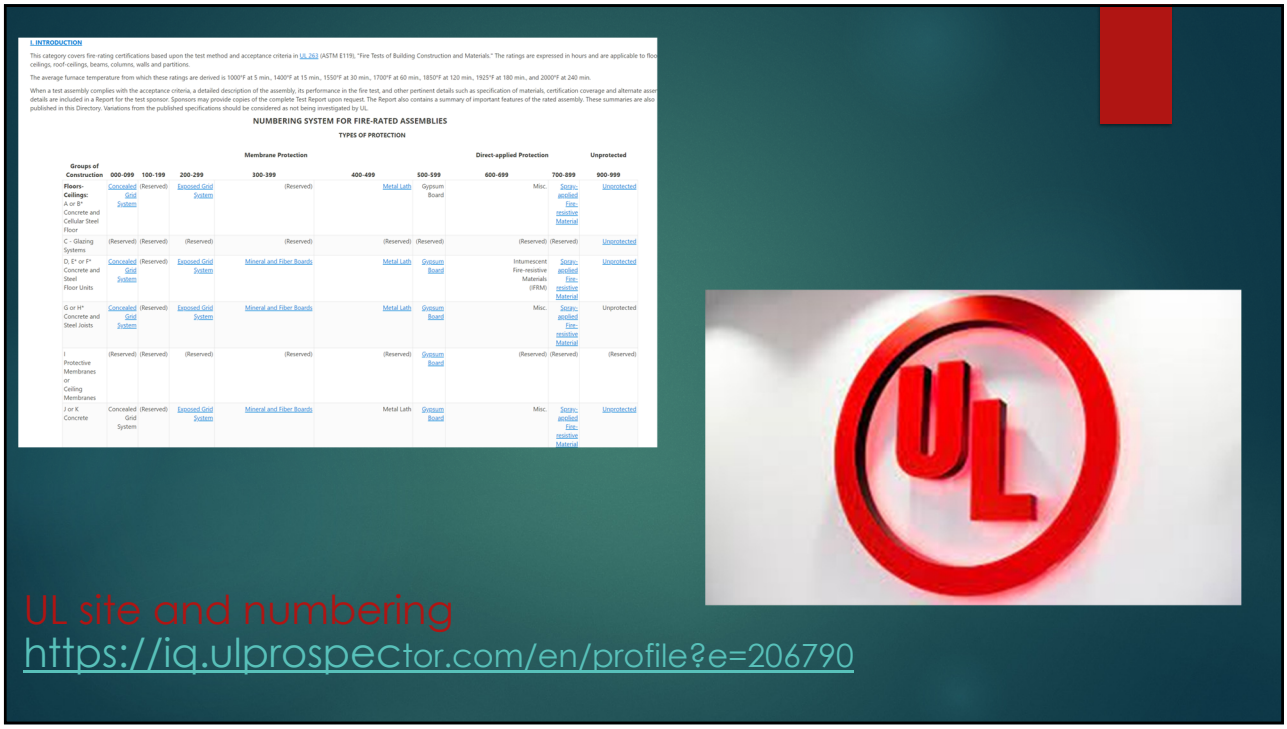
17

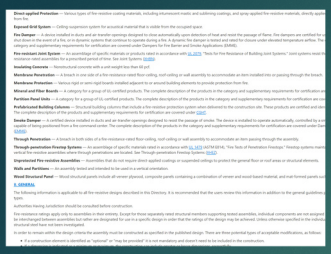

I. INTRODUCTION
This category covers fire-rating certifications based upon the test method and acceptance criteria in UL 263 (ASTM E119), "Fire Tests of Building Construction and Materials." The ratings are expressed in hours and are applicable to floor ceilings, roof-ceilings, beams, columns, walls and partitions.
The average furnace temperature from which these ratings are derived is 1000°F at 5 min., 1400°F at 15 min., 1550°F at 30 min., 1700°F at 60 min., 1850°F at 120 min., 1925°F at 180 min., and 2000°F at 240 min.
When a test assembly complies with the acceptance criteria, a detailed description of the assembly, its performance in the fire test, and other pertinent details such as specification of materials, certification coverage and alternate assem details are included in a Report for the test sponsor. Sponsors may provide copies of the complete Test Report upon request. The Report also contains a summary of important features of the rated assembly. These summaries are also published in this Directory. Variations from the published specifications should be considered as not being investigated by UL.
NUMBERING SYSTEM FOR FIRE-RATED ASSEMBLIES
TYPES OF PROTECTION
Membrane Protection
Direct-applied Protection
Unprotected
Groups of Construction
000-099
100-199
200-299
300-399
400-499
500-599
600-699
700-899
900-999
Floors-Ceilings: A or B* Concrete and Cellular Steel Floor
Concealed Grid System
(Reserved)
Exposed Grid System
(Reserved)
Metal Lath
Gypsum Board
Misc.
Spray-applied Fire-resistive Material
Unprotected
C - Glazing Systems
(Reserved)
(Reserved)
(Reserved)
(Reserved)
(Reserved)
(Reserved)
(Reserved)
(Reserved)
Unprotected
D, E* or F* Concrete and Steel Floor Units
Concealed Grid System
(Reserved)
Exposed Grid System
Mineral and Fiber Boards
Metal Lath
Gypsum Board
Intumescent Fire-resistive Materials (IFRM)
Spray-applied Fire-resistive Material
Unprotected
G or H* Concrete and Steel Joists
Concealed Grid System
(Reserved)
Exposed Grid System
Mineral and Fiber Boards
Metal Lath
Gypsum Board
Misc.
Spray-applied Fire-resistive Material
Unprotected
I Protective Membranes or Ceiling Membranes
(Reserved)
(Reserved)
(Reserved)
(Reserved)
(Reserved)
Gypsum Board
(Reserved)
(Reserved)
(Reserved)
J or K Concrete
Concealed Grid System
(Reserved)
Exposed Grid System
Mineral and Fiber Boards
Metal Lath
Gypsum Board
Misc.
Spray-applied Fire-resistive Material
Unprotected
UL site and numbering
https://iq.ulprospector.com/en/profile?e=206790

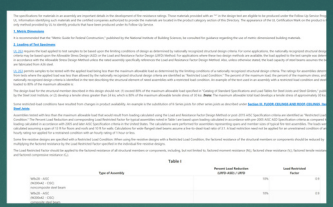
18

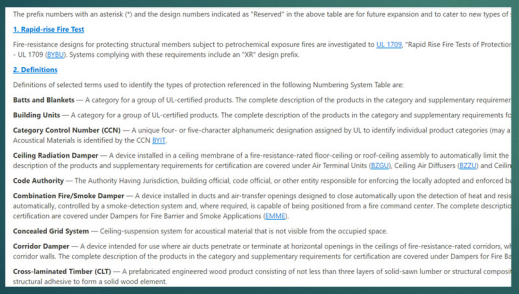
L or M Wood Joist or Combination Wood and Steel Assemblies	Concealed Grid System	(Reserved)	Exposed Grid System	(Reserved)	Metal Lath	Gypsum Board	Misc.	Spray-applied Fire-resistive Material	Unprotected
Beams: N or O* for Floor-Ceiling	Concealed Grid System	(Reserved)	Exposed Grid System	Batts and Blankets or Mineral and Fiber Boards	Metal Lath	Gypsum Board	Intumescent Fire-resistive Materials (IFRM)	Spray-applied Fire-resistive Material	Unprotected
Roof-Ceiling: P, Q* or R*	Concealed Grid System	(Reserved)	Exposed Grid System	Mineral and Fiber Boards	Metal Lath	Gypsum Board	Misc.	Spray-applied Fire-resistive Material	Unprotected
Beams: S or T* for Roof-Ceiling	Building Units	(Reserved)	Exposed Grid System	Mineral and Fiber Boards	Metal Lath	Gypsum Board	Intumescent Fire-resistive Materials (IFRM)	Spray-applied Fire-resistive Material	Unprotected
Wall and Partition: U, V or W	Building or Partition Panel Units	(Reserved)	Insulating and Precast Concrete	Wood Stud, Gypsum Board, Lath and/or Plaster	Metal Stud, Gypsum Board, Lath and/or Plaster	Misc.	Metal Panels, Gypsum Board, Lath and/or Plaster	Spray-applied Fire-resistive Material	Masonry and Precast Concrete
Columns: X, Y or Z*	Building Units	Pre-fabricated	Mat Materials	Batts and Blankets or Mineral and Fiber Boards	Metal Lath and Plaster	Gypsum Board	Intumescent Fire-resistive Materials (IFRM)	Spray-applied Fire-resistive Material	Masonry

UL site and numbering
https://iq.ulprospector.com/en/profile?e=206790

19







The prefix numbers with an asterisk (*) and the design numbers indicated as "Reserved" in the above table are for future expansion and to cater to new types of

1. Rapid-rise Fire Test

Fire-resistance designs for protecting structural members subject to petrochemical exposure fires are investigated to UL 1709, "Rapid Rise Fire Tests of Protection - UL 1709 (BYBU). Systems complying with these requirements include an "XR" design prefix.

2. Definitions

Definitions of selected terms used to identify the types of protection referenced in the following Numbering System Table are:

Batts and Blankets — A category for a group of UL-certified products. The complete description of the products in the category and supplementary requiremer

Building Units — A category for a group of UL-certified products. The complete description of the products in the category and supplementary requirements fo

Category Control Number (CCN) — A unique four- or five-character alphanumeric designation assigned by UL to identify individual product categories (may a Acoustical Materials is identified by the CCN BYJT.

Ceiling Radiation Damper — A device installed in a ceiling membrane of a fire-resistance-rated floor-ceiling or roof-ceiling assembly to automatically limit the description of the products and supplementary requirements for certification are covered under Air Terminal Units (BZGU), Ceiling Air Diffusers (BZZU) and Ceilin

Code Authority — The Authority Having Jurisdiction, building official, code official, or other entity responsible for enforcing the locally adopted and enforced bu

Combination Fire/Smoke Damper — A device installed in ducts and air-transfer openings designed to close automatically upon the detection of heat and resis automatically, controlled by a smoke-detection system and, where required, is capable of being positioned from a fire command center. The complete descriptio certification are covered under Dampers for Fire Barrier and Smoke Applications (FXME).

Concealed Grid System — Ceiling-suspension system for acoustical material that is not visible from the occupied space.

Corridor Damper — A device intended for use where air ducts penetrate or terminate at horizontal openings in the ceilings of fire-resistance-rated corridors, wa corridor walls. The complete description of the products in the category and supplementary requirements for certification are covered under Dampers for Fire Ba

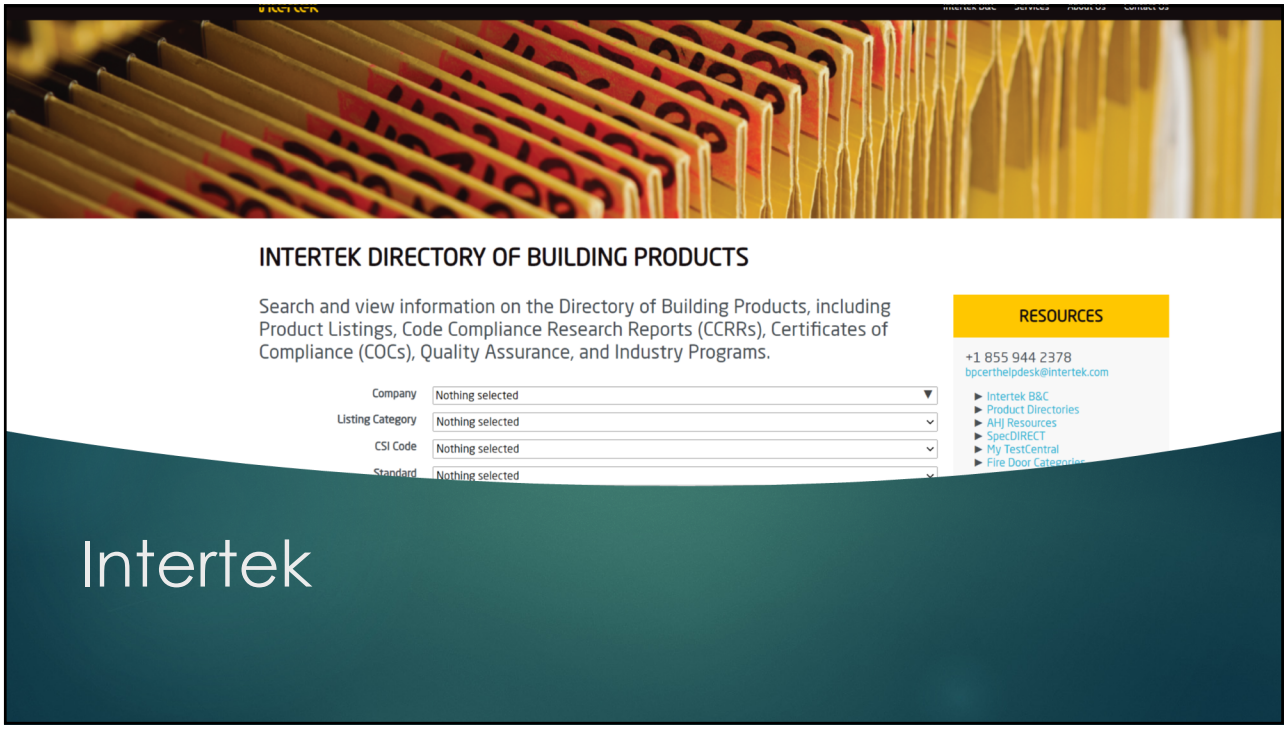
Cross-laminated Timber (CLT) — A prefabricated engineered wood product consisting of not less than three layers of solid-sawn lumber or structural composit structural adhesive to form a solid wood element.

UL

https://iq.ulprospector.com/en/profile?e=206790#Sectionlitem1

Much information, many links, many assemblies

20


INTERTEK DIRECTORY OF BUILDING PRODUCTS
Search and view information on the Directory of Building Products, including Product Listings, Code Compliance Research Reports (CCRRs), Certificates of Compliance (COCs), Quality Assurance, and Industry Programs.
Company
Nothing selected
Listing Category
Nothing selected
CSI Code
Nothing selected
Standard
Nothing selected
RESOURCES
+1 855 944 2378
bpcerthelpdesk@intertek.com
Intertek B&C
Product Directories
AHJ Resources
SpecDIRECT
My TestCentral
Fire Door Categories
Intertek

21


INTERTEK DIRECTORY OF BUILDING PRODUCTS
Search and view information on the Directory of Building Products, including Product Listings, Code Compliance Research Reports (CCRRs), Certificates of Compliance (COCs), Quality Assurance, and Industry Programs.
Habersham Metal One-Hour Fire-Resistance-Rated Ceiling Assembly
Company: Habersham Metal Products Company, Inc.
ATTRIBUTES
DESIGN DOCUMENTS
PUBLIC DOCUMENTS
No Results
Intertek

22

Resources

Guidelines on Fire Ratings of Archaic Materials and Assemblies – IEBC Chapter Resource A

The Guideline on Fire Ratings of Archaic Materials and Assemblies focuses upon the fire-related performance of archaic construction. "Archaic" encompasses construction typical of an earlier time, generally prior to 1950. "Fire related performance" includes fire resistance, flame spread, smoke production and degree of combustibility.

Harmathy's Rules
Ten Rules of Fire Endurance Rating
ICC

The author sets forth ten rules that may prove useful for quick assessment of the fire endurance of building elements.

23

Documentation

24

CAC 7-104

7-104. Alternate method of compliance. The provisions of the *California Building Standards Code* (CBSC) are not intended to prevent the use of any alternate method of compliance not specifically prescribed by the CBSC, **provided** written approval for such alternate method has been granted by the Office. Alternate methods include Alternate Means of Protection, Alternate Method of Compliance, Alternative System, designs required by regulations to be specifically approved by the enforcing agency, and Program Flexibility. **A** written request shall be submitted to the Office with **an** Alternate Method of Compliance form provided by the Office and supporting documentation as necessary to assist the Office in its review. **The** written request shall include substantiating evidence in support of **the** alternate. If the request is submitted prior to the submittal of construction documents, an Application for Plan Review form must also be submitted with a fee pursuant to Section 7-133 (a) 3. A request approved by the Office shall be limited to **the specific** request and **shall not** be construed as establishing a precedent **for any future** requests. The provisions of the following sections must also be met: Section 104.11 and Section 1224.2, *California Building Code*; Article 90.4, *California Electrical Code*; Section 105.0, *California Mechanical Code*; Section 301.4, *California Plumbing Code*; and Section 1.11.2.4, *California Fire Code*.

25

Number of EJs per AMC

EJs that are based on the same existing tested, listed system that is comparable in application **or** covers equivalent conditions may be combined into a single AMC.

26

EJ Preparation

(EJ) shall be *prepared and signed* by:

Manufacturer's qualified technical personnel

Registered Professional Engineer/Fire Protection Engineer

Approved independent testing agency that provides listing services for firestop systems in concurrence with the manufacturer

(EJ) based on:

Existing tested, listed system that is comparable in application **or** covers equivalent conditions.

Reasonable performance expectations for the fire-resistive system for the specific application.

Individuals shall be knowledgeable regarding:

Elements of the construction to be protected

Probable behavior of that construction

Recommended system protecting it

(EJ) shall apply only to:

Specific conditions and configurations for which it was produced. and shall be based upon reasonable performance expectations for the recommended fire-resistance-rated system for the specific application.

27

EJ Preparation

(EJ) shall be in a narrative format that clearly describes:

All aspects of the design, including but not limited to;

The hourly rating required

A complete description of all critical elements of the fire-resistive system configuration

Any non-standard conditions

Clear directions for installation of the recommended system and fire-resistive design(s) that the (EJ) is based on

Detailed drawings to clearly illustrate the assembly and where it occurs

(EJ) shall clearly state:

The recommended system is an (EJ) and is NOT a listed system

(EJ) shall indicate:

Facility name

Address

Title of project

OSHPD project number

(EJ) shall include:

Issuer's name

Title

Address

Telephone number

Signature

28

Reason for Engineering Judgment: There is no Listed System for protecting the slab edge joint with access from the outside of the building only when a steel stud exterior is offset a 2 hour deck edge a max 2". Additionally there is no testing to allow for this slab edge protection to occur where the firestopping would be abutting a protected steel column. This installation is following CW-S-0003 almost exactly but due to the 2" offset CW-S-0001 is referenced which allows 2" offset. Additionally since Firestop spray cannot overlap the concrete floor inside the building a seal of spray or sealant has been added to the underside of the bottom track and FW-D-0005 has been added to show sealant used in a horizontal underside installation. Finally, STI/JF 120-01 has been added as a referenced system to show mineral wool and AS200 compressed up to a fireproofed steel column.

Referenced System	Joint Width/Annular Space	F Rating/Assembly Rating	L Rating	Movement
CW-S-0001	Max 2"	2 Hour	1 CFM/Lin Ft	N/A
FW-D-0005	Nom 1"	3 Hr	Less Than 1 CFM/Lin Ft	12.5% Compression or Extension
STI/JF 120-01	Max 1.5"	2 Hour	N/A	N/A
CW-S-0003	Max 1"	2 Hour	Max 1"	N/A

Section of Engineering Judgment	Referenced UL System	Reason for use as Reference
1. Floor Assembly	CW-S-0003	Section 1 shows testing with Min 4 ½" thick reinforced lightweight or normal structural concrete slab
2. Exterior Wall Assembly	CW-S-0001	Section 2 of Listing shows exterior framing construction and max 2" offset of framing.
3. Forming Material	CW-S-0003, STI/JF 120-01	CW-S-0003: Section 3A shows testing with Nom 4 pcf mineral wool insulation cut to width nominally ½" wider than width of stud cavity and filling the bottom track at offset framing

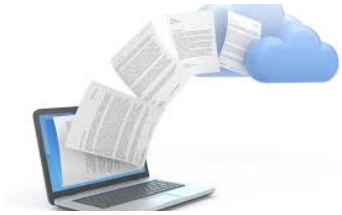
Sample EJ (Supporting documentation not included)

29

Documentation

- EJs that are not in compliance with Item 4 of Section 703.3 shall be submitted for review and approval in accordance with Title 24, Part 1, Section 7-104 "Alternate Method of Compliance" (AMC).
- An AMC approved by the Office after start of construction that constitutes a material change to approved construction documents shall be submitted to the Office in accordance with Title 24, Part 1, Section 7-153(a) "Changes in the Work" in the form of an Amended Construction Document (ACD). Multiple EJs that have been approved as AMCs may be submitted as a single ACD.

30



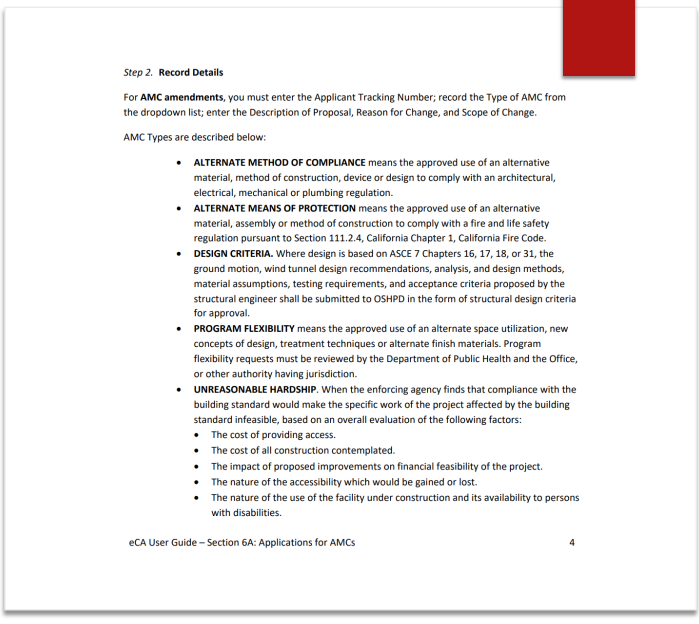
OSHPD eServices Portal

Documentation Submittal eSP

31

eSP and Acella AMC docs submittal User Guides

- eServices Portal Information - OSHPD (ca.gov)
- Scroll to User Guides
- 6A.-Applications-for-AMCs.pdf



Step 2. **Record Details**

For **AMC amendments**, you must enter the Applicant Tracking Number; record the Type of AMC from the dropdown list; enter the Description of Proposal, Reason for Change, and Scope of Change.

AMC Types are described below:

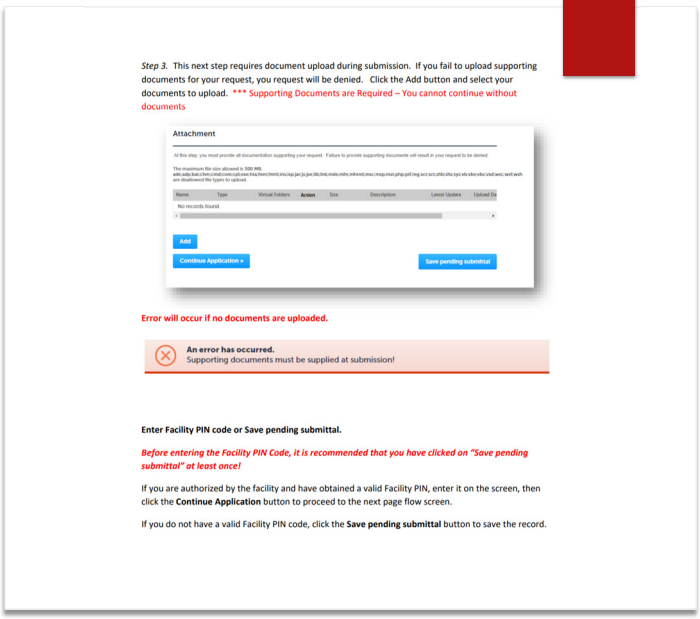
- **ALTERNATE METHOD OF COMPLIANCE** means the approved use of an alternative material, method of construction, device or design to comply with an architectural, electrical, mechanical or plumbing regulation.
- **ALTERNATE MEANS OF PROTECTION** means the approved use of an alternative material, assembly or method of construction to comply with a fire and life safety regulation pursuant to Section 111.2.4, California Chapter 1, California Fire Code.
- **DESIGN CRITERIA.** Where design is based on ASCE 7 Chapters 16, 17, 18, or 31, the ground motion, wind tunnel design recommendations, analysis, and design methods, material assumptions, testing requirements, and acceptance criteria proposed by the structural engineer shall be submitted to OSHPD in the form of structural design criteria for approval.
- **PROGRAM FLEXIBILITY** means the approved use of an alternate space utilization, new concepts of design, treatment techniques or alternate finish materials. Program flexibility requests must be reviewed by the Department of Public Health and the Office, or other authority having jurisdiction.
- **UNREASONABLE HARDSHIP**. When the enforcing agency finds that compliance with the building standard would make the specific work of the project affected by the building standard infeasible, based on an overall evaluation of the following factors:
  - The cost of providing access.
  - The cost of all construction contemplated.
  - The impact of proposed improvements on financial feasibility of the project.
  - The nature of the accessibility which would be gained or lost.
  - The nature of the use of the facility under construction and its availability to persons with disabilities.

eCA User Guide – Section 6A: Applications for AMCs 4

32

Supporting docs

- Scroll to User Guides
- 6A.-Applications-for-AMCs.pdf
- Supporting documents are required to be submitted with the AMC
  - Complete submittal
  - Faster review time



Step 3. This next step requires document upload during submission. If you fail to upload supporting documents for your request, you request will be denied. Click the Add button and select your documents to upload. *** Supporting Documents are Required – You cannot continue without documents

Attachment

Add

Continue Application »

Save pending submittal

Error will occur if no documents are uploaded.

An error has occurred.
Supporting documents must be supplied at submission!

Enter Facility PIN code or Save pending submittal.

Before entering the Facility PIN Code, it is recommended that you have clicked on "Save pending submittal" at least once!

If you are authorized by the facility and have obtained a valid Facility PIN, enter it on the screen, then click the **Continue Application** button to proceed to the next page flow screen.

If you do not have a valid Facility PIN code, click the **Save pending submittal** button to save the record.

33

New ICC training and update to PIN 67

Updated PIN 67 language

…PROCEDURE

In order to be considered acceptable by OSHPD, training and certifications are required for individuals to conduct special inspections on fire-resistant penetrations and joints. The following are required:

Special Inspectors conducting inspections for an approved inspection agency

or

Hospital Inspector Class "A", "B" or "C" certification,

and

The following certifications;

A current Firestopping Credential of Learning Achievement (CLA) issued by the International Code Council (ICC) in accordance with the requirements established and administrated by the ICC.

34

New ICC training and update to PIN 67

….In accordance with California Building Code Section 202, a special inspector is a qualified person employed or retained by an approved agency and approved by the building official as having the competence necessary to inspect a particular type of construction requiring special inspection.

A current Firestopping Credential of Learning Achievement (CLA) issued by the International Code Council (ICC) in accordance with the requirements established and administrated by the ICC shall be considered as acceptable qualifications for the special inspection of fire-resistant penetrations and joints.

Please see;

ICC Learning Center (iccsafe.org)

35

Thank you!

36