Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201
More Contact Info (http://www.portlandoregon.gov//bds/article/519984)

APPEAL SUMMARY

Status: Hold for Additional Information

Appeal ID: 23507	**Project Address:** 151 N Killingsworth St
Hearing Date: 2/26/20	**Appellant Name:** Justin Cammack
Case No.: B-014	**Appellant Phone:** 503-297-8791
Appeal Type: Building	**Plans Examiner/Inspector:** John Cooley, Corey Stanley
Project Type: commercial	**Stories:** 4 **Occupancy:** M, R-2, S-1 **Construction Type:** V-A, V-A, V-A
Building/Business Name: Koz Killingsworth LLC	**Fire Sprinklers:** Yes - Throughout
Appeal Involves: Erection of a new structure	**LUR or Permit Application No.:** 19-109551-CO
Plan Submitted Option: pdf [File 1] [File 2] [File 3] [File 4] [File 5]	**Proposed use:** Ground floor retail & living units, 3 upper floors living units

APPEAL INFORMATION SHEET

Appeal item 1

Code Section	703.2
Requires	Fire protection of structural beams utilizing standard spray applied fireproofing.
Code Modification or Alternate Requested	Requesting approval to use UL column design for wide flange beams when supporting a rated wood floor assembly.
Proposed Design	The use of column design thicknesses for wide flange beams. See attached letter and engineering judgement for more information.
Reason for alternative	There exists no UL design for fireproofing structural steel beams within wood construction as such we propose to utilize the column design which is based on a more stringent 4-side exposure.

APPEAL DECISION

Alternate fire rated beam assembly with engineering analysis: Hold for additional information. Appellant may contact John Butler (503 823-7339) with questions.

Additional information is submitted as a no fee reconsideration, following the same submittal process and using the same appeals form as the original appeal. Indicate at the beginning of the appeal form that you are filing a reconsideration and include the original assigned Appeal ID number. The reconsideration will receive a new appeal number.
Include the original attachments and appeal language. Provide new text with only that information that is specific

to the reconsideration in a separate paragraph(s) clearly identified as "Reconsideration Text" with any new attachments also referenced. No additional fee is required.

FRAMING PLAN NOTES

A. COORDINATE WALL TYPES WITH ARCHITECTURAL DRAWINGS.

B. FRAME ALL EXTERIOR WINDOW/DOOR OPENINGS PER DETAIL 13/S4.0 AND ALL INTERIOR DOOR OPENINGS PER DETAIL 14/S4.2.

C. LOCATE COLUMNS IN WALLS AS REQ'D TO MINIMIZE FURRING.

D. ALL DIMENSIONS FROM FACE OF STUD TO C.L. OF POST OR COLUMN, TYP. U.N.O.

E. FLOOR SHEATHING IS TO BE 23/32" T&G SHEATHING w/ 10d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD.

F. ALL HEADERS TO BE DF #2, TYP. U.N.O. SEE HEADER SCHEDULE FOR SPANS/SIZES. NOT ALL HEADERS MAY BE NOTED ON PLANS.

G. PROVIDE 2X FLAT BLOCKING UNDER STRAPPING AS REQ'D WHEN NAILING TO SHEATHING. SEE 12/S4.0.

COLUMN SCHEDULE

MARK	COL SIZE	NOTES
C-1	4x4	DF#2
C-2	4x6	DF#2
C-3	6x6	DF#2
C-4	HSS 4x4x1/4	–
C-5	HSS 5x5x3/8	–
C-6	–	–
C-7	–	–
C-8	–	–

NOTES:
1. SEE DETAIL 19/S4.0 FOR TYPICAL WOOD BEAM TO WOOD COLUMN
2. SEE DETAIL 20/S4.0 FOR TYPICAL BUILT-UP WOOD COLUMN NAILING
3. NOT ALL COLUMN TYPES MAY BE USED

BEAM SCHEDULE

MARK	BEAM SIZE	NOTES
BM-1	1 3/4 x 11 7/8	1.9E LVL
BM-2	3 1/2 x 11 7/8	2.0E PSL
BM-3	5 1/4 x 11 7/8	2.0E PSL
BM-4	5 1/2 x 12	24F-V4 GLB
BM-5	6 3/4 x 12	24F-V4 GLB
BM-6	3 1/2 x 18	2.0E PSL
BM-7	–	–
BM-8	–	–

NOTES:
1. NOT ALL BEAM TYPES MAY BE USED

JOIST SCHEDULE

MARK	JOIST SIZE / SPACING	NOTES
J-1	2x8 DF#2 @ 16" O.C.	TYP. CORRIDOR FLR. JOISTS
J-2	(2) 2x8 DF#2 @ 16" O.C.	–
J-3	11 7/8 TJI 110 @ 16" O.C.	TYPICAL FLOOR JOISTS
J-4	11 7/8 TJI 110 @ 24" O.C.	TYPICAL FLOOR JOISTS
J-5	11 7/8 TJI 360 @ 16" O.C.	–
J-6	11 7/8 TJI 560 @ 12" O.C.	–

HEADER SCHEDULE

MAX. SPAN	HEADER SIZE	NOTES
4'-0"	4x10	–
6'-0"	4x12	–
8'-0"	4x12	–
–	–	–

NOTES:
1. NOT ALL HEADERS SHOWN MAY BE SHOWN ON PLANS
2. SEE PLAN FOR SPANS GREATER THAN SHOWN IN SCHEDULE

FRAMING PLAN LEGEND

WOOD STUD WALL: 2x AT 16" O.C. TYP. U.N.O. COORDINATE FRAMED WALL CONSTRUCTION & TYPES w/ SHEAR WALL SCHEDULE AND ARCHITECTURAL DRAWINGS. SEE DETAIL 15/S4.0 FOR TOP PLATE CONNECTIONS.

SHEAR WALL: INSTALL SHEATHING ABOVE AND BELOW WINDOWS & DOORS WHEN PRESENT WITHIN BOUNDARIES OF SHEAR WALLS, TYP. SEE DETAILS 1/S4.0 & 9/S4.0 FOR REQUIREMENTS AT ADJOINING AND INTERSECTING CONDITIONS.

HOLD DOWN – PLACE HDs AT ENDS OF SHEAR WALLS (TYP. WHERE NOTED ON PLAN). SEE SCHEDULE, SHEET S1.0, FOR HD TYPES & COMPRESSION POST REQUIREMENTS.

SHEAR WALL TAG. SEE SCHEDULE, SHEET S1.0 FOR SHEAR WALL TYPES.

FLOOR JOIST – TYPE, SPACING & ORIENTATION PER PLAN

STRAP – REQ. LENGTH & NAILING PER PLAN

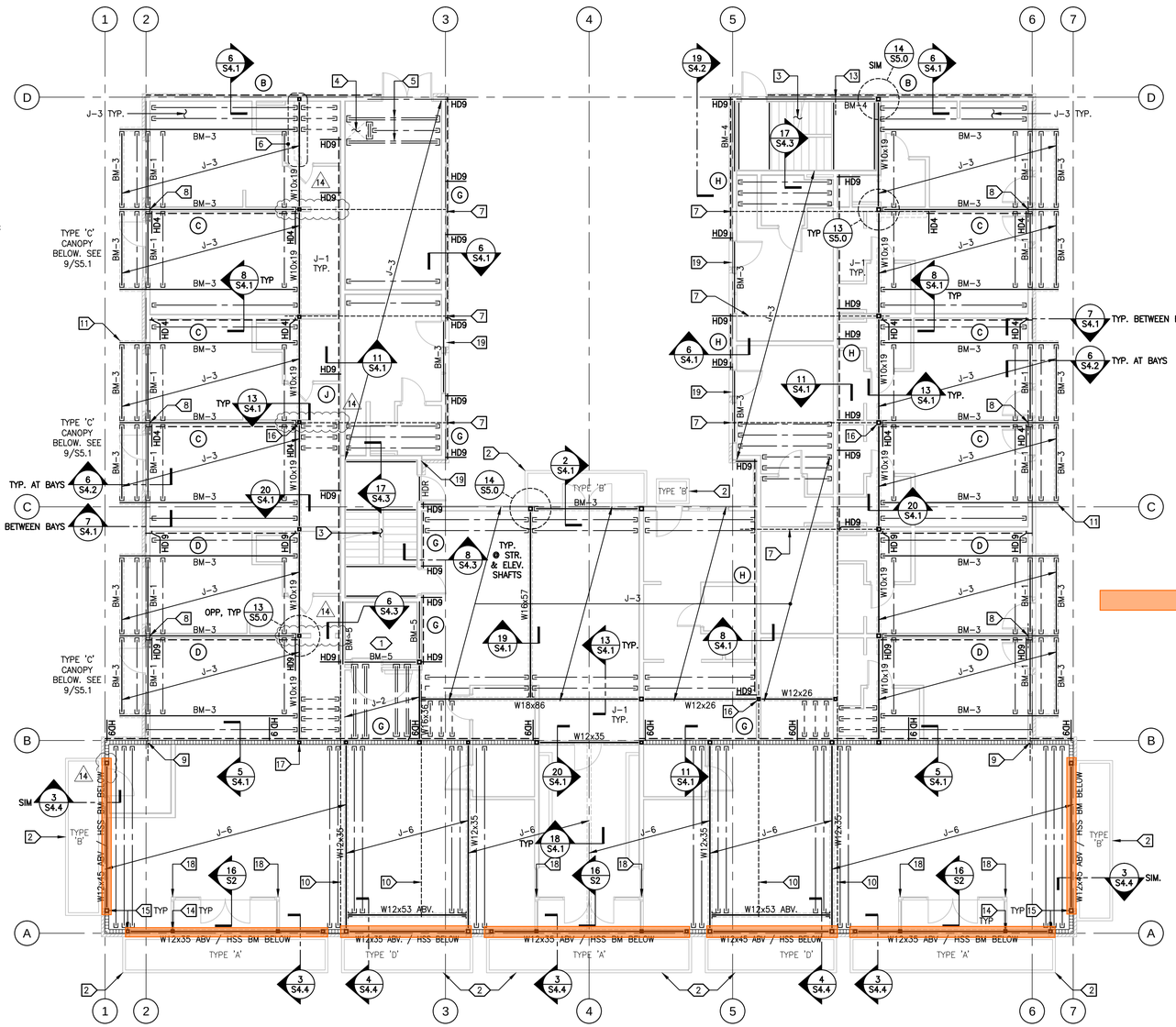
BM-1 — WOOD BEAM – SIZE PER PLAN. FLUSH BEAMS TYPICAL. DROPPED BEAMS MARKED (DR)

C-1 — COLUMN – SEE COLUMN DETAILS FOR ADDITIONAL INFO. SEE COLUMN SCHEDULE FOR COLUMN TYPES

— KEYNOTE TAG

FRAMING PLAN KEYNOTES

1. ELEVATOR SHAFT WALL CONSTRUCTION: SEE ARCH. FOR MF'R REQUIRED FINISH DIMENSIONS, WALL SECTIONS & FIRE RATING REQUIREMENTS. SEE 7/S4.3. 8/S4.3 & 9/S4.3 FOR IN-FLOOR BEAMS AT UNIT OR CORRDOR FLOOR FRAMING BEARING AT SHAFT WALL
2. STEEL CANOPY, TYPE PER PLAN. SEE DETAILS, SHEETS S5.1 & S5.2 FOR ATTACHMENT TO BUILDING STRUCTURE
3. WOOD-FRAMED STAIRS, SEE DETAILS 16/S4.2 & 18/S4.2
4. SHAFT OPENING THROUGH FLOOR.
5. PROVIDE DBL. JOISTS AT EACH SIDE OF SHAFT
6. USE SIMPSON BA HANGERS AT JOISTS TO WF UNDER OFFSET WALL ABOVE
7. SIMPSON CS16 x CONTINUOUS w/ 10d x 1 1/2" NAILS TO FLOOR JOIST OR BLOCKING @ 2" O.C. LAP WALL TOP PLATE 1'-6"
8. SIMPSON CMSTC16 COLLECTOR STRAP FROM BEAM TO BEAM, LAP 2'-0" MIN.
9. SIMPSON CMSTC16 COLLECTOR STRAP. LAP FLOOR & WALL 2'-0" MIN.
10. SIMPSON CMSTC16 x CONT. FASTEN TO JOIST w/ 10d x 1 1/2" NAILS @ 2" O.C. & LAP WALL PLATE 2'-0" MIN.
11. LINE OF CANTILEVERED FLOOR FRAMING, TYP. FOR (3) BAYS THIS SIDE
12. SPECIAL WALL FRAMING: 2x6 STUDS @ 12" O.C. TYPICAL FOR HATCHED WALLS ALONG GRID LINES 1, 7, A & B
13. SIMPSON MSTC32 FROM LANDING BEAM TO IN-WALL BEAM
14. SEE DETAIL 3/S5.0 FOR CONTINUOUS WF TO COLUMN CONNECTION, TYPICAL AT EXTERIOR
15. SEE DETAIL 4/S5.0 FOR WF TO COLUMN CONNECTION, TYPICAL AT EXTERIOR
16. SEE DETAIL 8/S5.0 FOR WF TO TWO SIDES OF COLUMN CONNECTION, TYPICAL AT INTERIOR
17. SEE DETAIL 9/S5.0 FOR WF TO COLUMN CONNECTION, TYPICAL AT INTERIOR
18. CORNER FRAMING TO INCORPORATED INTO STOREFRONT SYSTEM. DESIGN PER MANUFACTURER
19. SEE DETAIL 1/S4.4 FOR HOLD DOWN STRAP FROM ABOVE TO HEADER BEAM
20. STRAP HOLD DOWN FROM ABOVE, THIS FLOOR

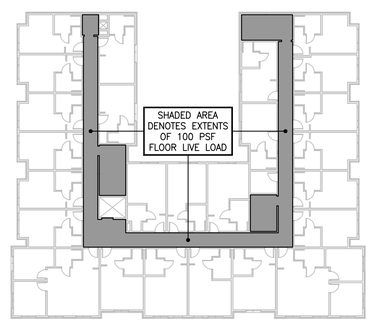


2ND FLOOR FRAMING PLAN

1/8"=1'-0"

SHOWING 1ST FLOOR WALLS BELOW

- Locations of SFRM @ W 12x35/45 Beams



FLOOR LOADING KEYPLAN

SHOWING 2ND FLOOR WALLS & FLOOR

ALLSTRUCTURE Engineering LLC
16154 SW Upper Boones Ferry Rd • Portland, Oregon 97224
v: 503.620.4314 • f: 503.620.4304 • www.allstructure.com

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 76768PE OREGON MARCH 10, 2006 RYAN HARDIE
Expires: 6/30/21

APARTMENT BUILDING
105 N KILLINGSWORTH ST
PORTLAND, OR

2ND FLOOR FRAMING PLAN

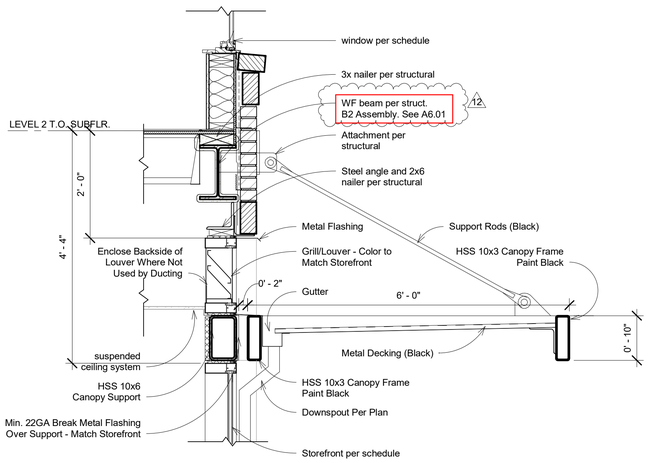
ISSUE:
FOR PERMIT 01.08.18
5. RESP. TO COMMENTS 04.29.19
10. RESP. TO COMMENTS 06.14.19
13. RESP. TO COMMENTS 07.18.19

DATE: 01.08.18
SHEET SIZE: 24x36
DRAWN BY: WM, RH
CHK'D BY: RH

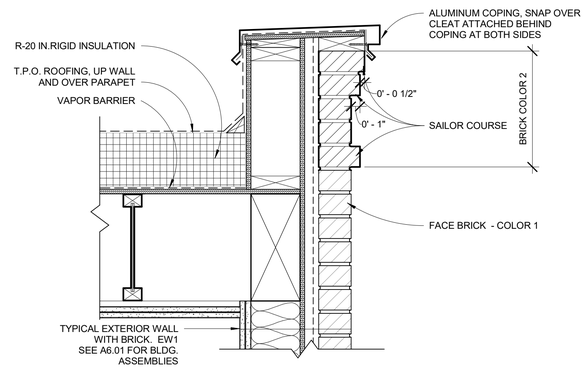
SHEET
S2.1

PROJECT No.:
18147.00

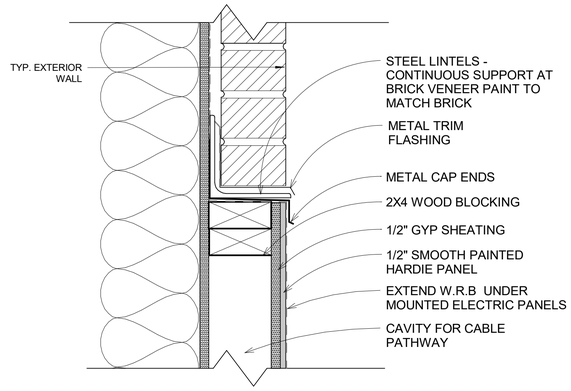
Section Detailing SFRM at WF Beam

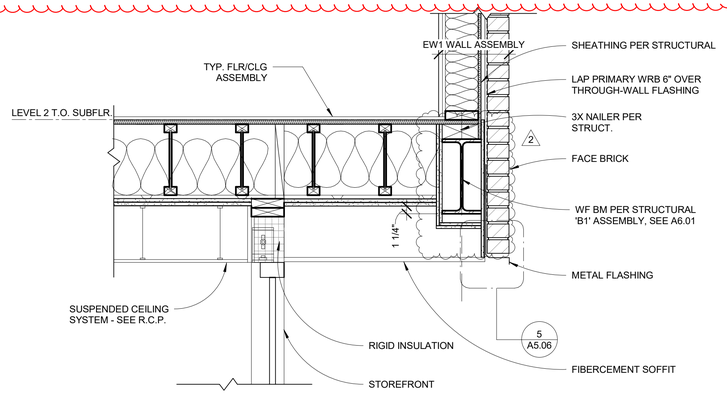


1 Canopy Section Detail
3/4" = 1'-0"

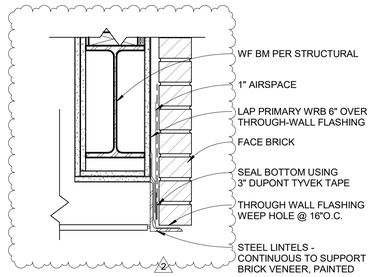


2 Brick Parapet1
1 1/2" = 1'-0"

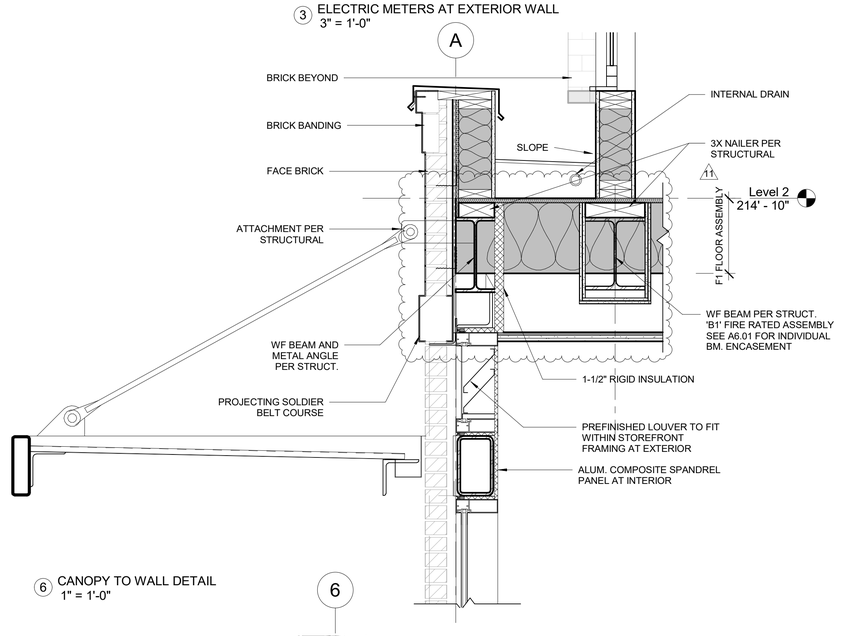




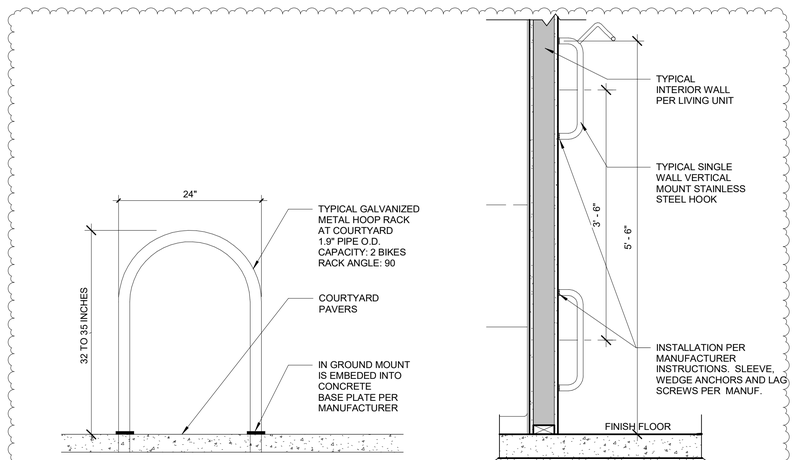
4 EXTERIOR SOFFIT AT STOREFRONT
1" = 1'-0"



5 SOFFIT AT BRICK VENEER1
1 1/2" = 1'-0"

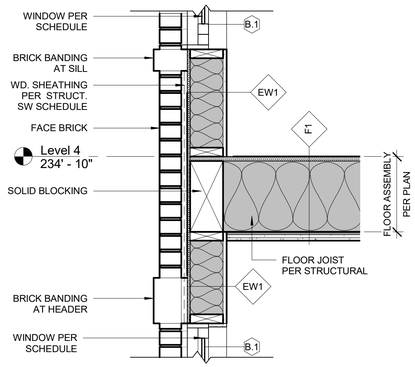


6 CANOPY TO WALL DETAIL
1" = 1'-0"

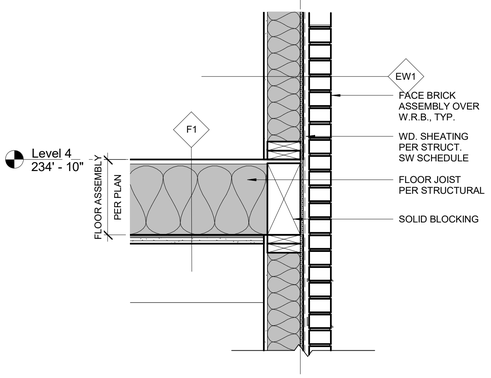


7 TYP. HOOP BIKE RACK
1" = 1'-0"

10 TYPICAL WALL MOUNT BIKE HOOK AT UNITS
1" = 1'-0"



8 EXTERIOR WALL DETAIL - 2
1" = 1'-0"



9 EXTERIOR WALL DETAIL - 3
1" = 1'-0"

Permit Set

REGISTERED ARCHITECT 6733 JOSHUA S. SCOTT SNOHOMISH, WASHINGTON STATE OF OREGON

#	DATE	DESCRIPTION
12	07-15-19	Life Safety
11	06-19-19	Life Safety
2	04-19-19	Life Safety

kōz DEVELOPMENT
1830 BICKFORD AVE, SUITE 201
SNOHOMISH, WA 98290
206.755.1290

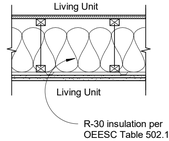
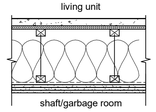
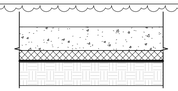
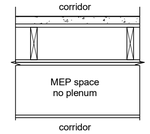
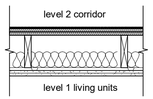
151 N. Killingsworth Street Portland, OR 97217

EXTERIOR DETAILS

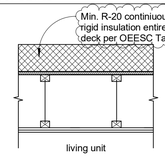
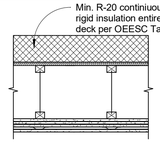
DATE: **Issue Date**

SHEET: **A5.06**

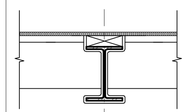
FLOOR/CEILING TYPE ASSEMBLIES

FLOOR TYPE	FLOOR/CEILING DETAIL	ASSEMBLY DESIGN AND DESCRIPTION	RATING FIRE	RATING SOUND	RATING THERMAL
F1		**UL DESIGN L570 (or GA FILE No. 5011)** -Floor underlayment - Min. 3/4 in. thick -Subfloor - 19/32 in. thick plywood underlayment. -Structural members - Min. 9-1/2 in. min. deep engineered wood I-joists spaced 24 in. o.c. max. -Ceiling support - Resilient channels spaced 16 in. o.c. or suspension system Finish ceiling - Two layers of 1/2 in. or 5/8 in. thick by 4 ft. wide "gypsum panels installed perpendicular to the resilient channels w/ 1 in. long Type S screws spaced 8 in. o.c. at the butt joints and 16 in. o.c. in the field of the panel. The face layer screw-attached to the resilient channels with 1-5/8 in. Type S screws spaced 8 in. o.c. and 1-1/2 in. Type G screws spaced 8 in. o.c. at the butt joints located mid span between resilient channels. -Glass fiber insulation, secured to the subflooring w/ staples or to the wood joist w/ 0.090 in. diam. galv. steel wires. Any thickerss of fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. 1/4 in. sound reduction mat, and w/ finish flooring of sheet vinyl, engineered wood laminate or ceramic tile. Note: When insulation is secured to the underside of the subfloor 5/8 in Type SCX may be used.	1-HOUR	STC: 60 sound test: RAL OT03-05, 4-22-03; RAL OT03-07, 4-29-03; RAL OT03-09, 6-18-03.	R-30
		* USG Sheetrock Brand Firecode X panels - 5/8 in. (UL Type SCX) *USG Sheetrock Brand Gypsum Base Imperial, Firecode X - 5/8 in. (UL Type IP-X1) *USG Sheetrock Brand UltraLight Panels Firecode X - 5/8 in. (UL Type ULIX) *USG Sheetrock Brand Mold Tough Firecode X Panels (UL SCX) * USG Sheetrock Brand MH Gypsum Base Board Firecode X - 5/8 in. (UL Type SCX)				
F3		**UL DESIGN L538** - Finish flooring: Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. - Optional floor mat material: 5/64 in. thick adhered to subfloor with 'Hacker Floor Primer'. Primer to be applied to surface of mat prior to the placement of a min. 1 in. of flr.-topping mixture. - Subflooring: Min. 15/32 in. thick sheathing. - Structural wd. members: Min. 9-1/2 in. (11-7/8 in used) 'I' joist spaced max. 19.2 o.c. - Furring channels: Resilient channels, 1/2 in. deep, spaced 16 in. o.c. perp. to joists. secured to ea. joist w/ 1-7/8 in long Type S steel screws with hi-lo threads. - Gypsum board: Three layers of 5/8 in. by 4 ft wide gypsum board, USG Sheetrock Brand UL type C.	- 2 HOUR	STC-50 Sound Test: RAL-OT03-05/06	R-30
F2		- CONCRETE SLAB ON GRADE (PER STRUCTURAL) -4 in. thick reinforced concrete slab on grade over -rigid insulation (extend 24 in.) over -10 mil. vapor retarder membrane over -prepared sub-base per geotech report.	-	-	R-15
F4		- Finished floor per plan - 1" gypcrete over acoustic mat - 3/4" subfloor - 2x dimensional lumber floor joist - (2) layers 5/8" Type 'X' GWB - MEP space as necessary - T-bar suspended ceiling system grid ACCESS PANELS INTO MEP SPACE SHALL BE NON-RATED. NOTE: LOWERED MEP SPACE WITH ADDITIONAL CEILING BELOW RATED ASSEMBLY ONLY WHERE NECESSARY AND INDICATED	1 HOUR OSSC TABLE 721.1(3) ITEM 21-1.1	-	-
F5		**GA FILE No. FC 5120** One layer 1/2 in. type 'X' gypsum wallboard or gypsum veneer base applied at right angles to resilient furring channels 24 in o.c. w/ 1 in. Type S drywall screws 8 in. o.c. at ends12 in. o.c. at intermediate furring channels. Gypsum board end joints located midway between cont. channels and attached to additional pieces of channels 64 in. long w/ screws 8 in. o.c. Resilient furring channels applied at right angles to 2x10 wood joists 16 in. o.c. w/ 6d coated nails, 1-7/8 in. long, 0.085 in. shank, 1/4 in. heads two per joist. Wood joists supporting 5/8 in interior plywood w/ exterior glue subfloor and 3/8 in. particle board, 1.5 psf. 3-1/2 in. glass fiber insulation batts, 0.7 pcf, friction fit in joist cavities suported alternately every 12 in by wire rods and resilient furring channels. Sound tested w/ carpet and pad w/ insulation stapled to joists. Note: carpet and pad at level 2 corridor	1 HOUR Fire test: FM FC-181, 8-31-72	STC 50 Sound test: G&H OC-3MT, 10-13-71	3-1/2 in (R-13)

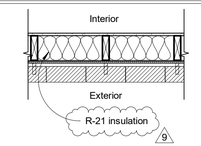
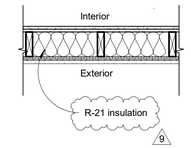
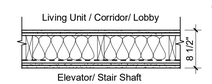
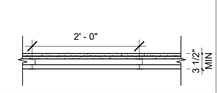
ROOF ASSEMBLY

ROOF TYPE	ROOF DETAIL	ASSEMBLY DESCRIPTION	RATING FIRE	RATING SOUND	RATING THERMAL
R1		**QSCC TABLE 721.1(3) Item 26-1.1** -Two layers of 1/2 in. type 'X' gypsum wallboard applied w/ the long dimension perpendicular to the I-joists w/ end joints staggered. Base layer fastened w/ 1-5/8 in. Type S drywall screws spaced 12 in. o.c. and face layer is fastened with 2 in. o.c. in the field 8 in. o.c. on the edges. -Wood I-joists (min. joist depth 9-1/4 in. w/ a min. flange thickness of 1-1/2 in. and a min. flange cross-sectional area of 2.25 square in., min. web thickness of 3/8 in.) at 24 in. o.c. max. Face layer end joints shall not occur on the same I-joist base layer end joints and end joints shall offset 24 in. from base layer joints. Facer layer to also be attached to base layer 1-1/2 in. Type G drywall screws spaces 8 in. o.c. places 6 in. from face layer end joints. Face layer wallboard joints to be taped and covered with joint compound.	1 HOUR	50 STC	R-20
R2		**GA FILE No. RC 2750** -**Base layer** 5/8 in. type 'X' gypsum wallboard applied at right angles to either 2x8 min. wood joists or 9-1/2 in. min. deep I-joists 24 in. o.c. max. with 1-1/4 in. Type W drywall screws 12 in. o.c. **Second layer** 5/8 in. type 'X' gypsum wallboard applied at right angles to joists with 2 in. Type W drywall screws 12 in. o.c. Second layer offset 24 in. from base layer joints. **Third layer** 5/8 in. type 'X' gypsum wallboard applied at right angles to joists w/ 2-1/2 in. Type W drywall screws 12 in. o.c. Third layer joints offset 12 in. from second layer joints. Hat-shaped rigid furring channels 24 in. o.c. applied at right angles to joists over third layer with two 2-1/2 in. long Type W drywall screws at ea. joist. **Face layer** 5/8 in. type 'X' gyp. wallboard applied at right angles to furring channels w/ 1-1/8 in. Type S drywall screws 12 in. o.c. Joists supporting 3/4 in. T&G edge plywood applied at right angles to joists with 8d nails 6 in. o.c. at joints and 12 in. at intermediate joists. Appropriate roof covering.	2 HOUR Fire test: UL R4024, 00NK26545, 4-27-01; UL R4042, 03NK11206, 3-19-03; UL Design L556; ULC Design M514	-	R-20

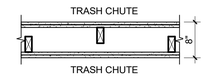
Beam Fireproofing assembly - UL X829 is for Isolatek brand approval of similar assembly to X732.

BEAM TYPE	BEAM DETAIL	ASSEMBLY DESCRIPTION	FIRE RATING
B2		**UL DESIGN UL X732** -Spray-Applied Fire Resistive Materials: Prepare by mixing with water according to instructions on each bag of mixture. Mixture can be spray or trowel applied in one or more coats to steel surfaces. Min. avg density of 55 pcf with min. ind value of 50 psf. For method of density determination, see Design Information Section, Sprayed Material. Surface material be lightly finished with a trowel. For 1 hour rating min. thickness in inches is 9/16. -Steel min. size, Type W10X49. CARBOLINE CO-Type 241 HD CARBOLINE KOREA LTD-Type 241 HD CARBOLINE (INDIA) PVT LTD-Type 241, Type 241 HD PERLITA Y VERMICULITA SLU-Type 241, 241 HD STONCOR MIDDLE EAST LLC-Type 241, Type 241 HD STONCOR SOUTH CONE SA-Type 241 Type HD	1 HOUR

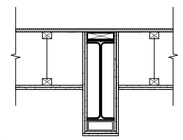
WALL TYPE ASSEMBLIES - INTERIOR

WALL TYPE	WALL DETAIL	ASSEMBLY DESIGN AND DESCRIPTION	RATING FIRE	RATING SOUND	RATING THERMAL
EW1		**UL DESIGN U356** **Wood studs:** Nom 2x4 min. (2x6 used) space 16 in. O.C. Studs laterally-braced by wood structural panels sheathing. **Gypsum Board**: Any 5/8 in. UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom. 5/8 in. thick by 4 ft. wide applied vertically and nailed to studs and bearing plates 7 in. o.c. w/ 6d cement-coated nails, 1-7/8 in. long w/ 1/4 in. diam head. **Batts and Blankets:** Mineral fiber or glass fiber insulation, 5-1/4 in. thick pressure fit to fill cavities between studs and plates. Glass fiber insulation to be faced w/ aluminum foil or kraft paper. **Wood structural panel sheathing:** Min. 7/16 in. thick, 4 ft. wide wood structural panels, min. grade 'C-D" or 'sheathing'. installed w/ long dimension of sheet (strenght axis) of face grain of plywood parallel w/ or perpemdicular to studs. Horizontal joints backed w/ nom 2x4 wood blocking. Attached to studs on exterior side of wall w/ 6d cement coated box nails spaced 6 in. o.c. at perimeter of panels and 12 in. o.c. interior studs. **Cladding: Brick.** Any type on nom. 4 in. wide brick veneer. when brick is used, the rating is applicable w/ exposure on either face. Brick fastened w/ corrugated metal wall ties attached over sheathing to wood studs w/ 8d nail per tie: ties spaces not more than ea. sixth course of brick and max. 32 in. o.c. horiz. One in. air space provided between brick veneer and sheathing.	1-HOUR	-	R-21
EW3		**GA FILE 8417** Exterior side: **base** layer *proprietary type 'X' gypsum sheathing to 2x4 min. (2x6 used) wood studs at 16 in. o.c. w/ 1-3/4 in., 0.125 in. shank, 7/16 in head galvanized roofing nails 8 in. o.c. or 2 in. Type S drywall screws 8 in. o.c. Pre-furred wire stucco netting applied over gypsum sheathing w/ 1-1/4 in. x 1 in. steel staples 7 in. o.c. Portland cement stucco, 3/4 in., applied over stucco netting. Interior side: **base** layer 5/8 in. *proprietary type 'X' gypsum wallboard or gypsum veneer base applied to studs w/ 1-1/4 in. Type S drywall screws 12 in. o.c. **Face** layer 5/8 in. *proprietary type 'X' gypsum wallboard ot gypsum veneer base applied to studs w/ 2 in. Type S drywall 12 in. o.c. Joints staggered 16 in. each layer and side (load bearing) **Batts and blankets:** Friction fit mineral wool batt insulation, 3-1/3in. min, (5-1/2 in. used) Thermafiber Inc. Type SAFB *National Gypsum Company -5/8 in. Gold Bond Brand FIRE SHIELD- gypsum board -5/8 in. Gold Bond Brand FIRE SHIELD- gypsum sheathing	2 - HOUR Fire Test: UL R3501, 03NK2475, 5-21-03, UL Design U371		R-21
IW1a		**UL ASSEMBLY U 334** -**Gypsum board**: UL type 'C', 5/8 IN. , 4 FT. wide attached to furring channels: base layer w/ 1 in. long Type S steel screws spaced max. 24 in. o.c. face layer w/ 1-5/8 in. long Type S steel screws spaced max. 12 in. o.c. attached to wood studs: base layer with 1-7/8 in. lon 6 d coated nails spaces max. 14 in. o.c., face layer 2-3/8 in. long 8d coated nails spaced max. 7 in. o.c. base layers installed vertically. face layers installed horizontally w/ butt joints offset 16 in. o.c. from base layers. -**Wood studs**: 2x4 min. (2x6 used) spaced 16 in. o.c. Studs cross braced at mid height and effectively fire stopped at top and bottom of wall. -**Batts and blankets:** Glass fiber insulation. Friction fit w/ R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide. -**Resilient channels:** 25 MSG galv steel, nom 2-1/2 in. wide by 1/2 in. deep. Resilient channels placed perpendicular to studs, spaced vertically max 24 in. o.c., flange portion attached to ea. intersecting stud w/ 1 in. Type S steel screws.	2-HOUR	STC 58 Sound test: USG-810219	R-21
IW5		**GA FILE No. WP 3243** -**Resilient channels** 24 in. o.c. attached at right angles to one side of min. 2x4 wood studs (2x6 used) 24 in. o.c. with 1-1/4 in.Type S drywall screws. -**Gypsum board:** one layer 5/8 in. type 'X' gypsum wallboard or gypsum veneer base applied at right angles to channels with 1 in. Type S drywall screws 8 in. o.c. with vertical joints located midway between studs. -5-1/2 in. mineral or **glass fiber insulation** in stud space. -Opposite side: one layer 5/8 in. type 'X' gypsum board or gysum veneer base applied parallel or at right angles to studs with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank, 15/64 in. heads, 7 in. o.c. -Vertical joints staggered 24 in. on oppsoite sides. (Load-Bearing)	1 - HOUR Fire Test: Based on UL R14196, 05NK05371, 2-15-05, UL Design U309	STC 50-54 Sound Test: NRCC TL-93-103, IRC-IR-761, 3/98	R-21
IM6		**UL DESIGN U 415 - System B** - Gypsum board: Two layers of 1/2 in. or 5/8 in., 4 ft board USG Sheetrock Brand - UL Type C - Steel studs: 2 1/2" USG C-H studs 25ga @ 24" o.c. - Batts and blankets: Min. 1 in. thick mineral wool insulation - Gypsum board: 1 in. thick by nom. 2 ft. wide gypsum panels friction fit. USG Sheetrock - UL Type SLX.	2 - HOUR		-

SHAFT WALL ASSEMBLY

WALL TYPE	SHAFT WALL DETAIL	ASSEMBLY DESCRIPTION	RATING FIRE	RATING SOUND	RATING THERMAL
IW7		**GA FILE No. WP 5530** -Base layer 5/8 in. type 'X' gypsum wallboard or gypsum veneer base applied at right angles to each side of 2x4 wood studs 16 in o.c. staggered 8 in. o.c. on 2x6 wood plates with 6d coated nails, 1-7/8 in. long 0.085 in. shank, 1/4 in. heads, 24 in. o.c. -Face layer 5/8 in. type 'X' gypsum wallboard or gypsum veneer base applied at right angles to each side with 8d coated nails, 2-3/8 in. long, 0.113 in. shank, 9/32 in. heads, 8 in. o.c. -Joints staggered 16 in. layer and side.	2 - HOUR Fire test WP 4135 (FM WP-360, 9-27-74); UL R4024, 10-31-68	-	-

STEEL BEAM ASSEMBLY

BEAM TYPE	BEAM DETAIL	ASSEMBLY DESCRIPTION	RATING FIRE	RATING SOUND	RATING THERMAL
B1		**GA FILE No. BM 1137** -Base layer 1/2 in. propietary type 'X' gypsum wallboard applied to beam cage with 1 in. Type S-12 drywall screws 12 in. o.c. -Face layer 1/2 in. propietary type 'X' gypsum wallboard applied to beam cage with 1-5/8 in. Type S-12 drywall screws 12 in. o.c. Joints offset from base layer joints. -Beam cage fabricated from 24 ga 7/8 in. x 1-3/8 in. steel angles screw attached to steel joists at beam top flange and 25 ga 2-1/2 in. steel runners hooked over beam lower flange and supporting 1-5/8 in. steel studs 24 in. o.c. -Min. beam size W8x15. (One hour unrestrained beam)	1 HOUR UL R1319-133, 7-16-75; Based in UL R3660-7 & 8, 11-12-87; UL Design L524	-	-

Proprietary Gypsum Board
-American Gypsum Co. LLC - 1/2 in. FireBloc type C
-CertainTeed Gypsum Inc. - 1/2 in. CertainTeed t ype C
-Georgia Pacific Gypsum LLC - 1/2 in. ToughRock -Fireguard C
-United States Gypsum Co. - 1/2 in. Sheetrock Brand Firecode C

Permit Set

REGISTERED ARCHITECT 6733 JOSHUA S. SCOTT SNOHOMISH, WASHINGTON STATE OF OREGON

#	DATE	DESCRIPTION
12	07-15-19	Life Safety
9	05-30-19	Life Safety
2	04-19-19	Life Safety

koz DEVELOPMENT
1830 BICKFORD AVE, SUITE 201
SNOHOMISH, WA 98290
206.755.1290

151 N. Killingsworth Street
Portland, OR 97217

BUILDING ASSEMBLIES

DATE: **Issue Date**

SHEET: **A6.01**

LIFE SAFETY CHECKSHEET

Review Date: February 12, 2020

Application #: **19-109551-DFS-02-CO**
IVR #: **4516471**

To:	APPLICANT	**RYAN DIXON** **901 NE GLISAN ST.** **PORTLAND, OR 97232**	Work: Home: Email:	(541) 206-8855 (503) - RYAN.DIXON@DEACON.COM
From:	BDS PLANS EXAMINER	**JOHN COOLEY**	Phone: Email:	(503) 823-7944 John.Cooley@portlandoregon.gov
cc:	OWNER	**KOZ ON N KILLINGSWORTH LLC** **1830 BICKFORD AVE #201** **SNOHOMISH, WA 98290**		

PROJECT INFORMATION

Street Address:	**151 N KILLINGSWORTH ST**
Description of Work:	**DEFERRED SUBMITTAL FOR FIREPROOFING**

The following assumptions were made when reviewing your project:

Code Edition	Occupancy group	Construction Type	Building Area	Stories	Sprinklers	Alarms
2014 OSSC	**M / R-2 / S-1**	**V-A V-A V-A**	**SF**	**4**	**Yes**	

PLAN REVIEW

Based on the plans submitted, the items listed below appear to be missing or not in conformance with the Oregon Structural Specialty Code (OSSC), ICC/ANSI A117.1 (ANSI), the Oregon Energy Efficiency Specialty Code (OEESC), and/or other City requirements.

Item #	Location on plans	Code Section	Clarification / Correction Required
1	Cover page	703.2	UL assembly X829 which is used for beams in the project is tested on columns. A building code appeal is needed to use the tested assembly for a different configuration than it was tested for.

End of Checksheet

To respond to this checksheet, come to the Bureau of Development Services located at 1900 SW Fourth Ave. The Development Service Center (1st floor) and Permitting Services (2nd floor) are open Monday through Friday from 8:00 a.m. to 3:00 p.m. (close at noon on Thursday). Please update all sets of submitted drawings by either replacing the original sheets with new sheets, or editing the originally submitted sheets. You can review "How to Update Your Plans in Response to a Checksheet" at http://www.portlandoregon.gov/bds/article/93028 Visit the BDS website for more helpful information and a current listing of services available in the Development Services Center.

Please complete the attached Checksheet Response Form and include it with your re-submittal.

If you have specific questions concerning this Checksheet, please call me at the phone number listed above. To check the status of your project, go to https://www.portlandmaps.com/advanced/?action=permits#basic. Or, you may request the status to be faxed to you by calling 503-823-7000 and selecting option 4.

You may receive separate Checksheets from other City agencies that will require separate responses.

RECHECK FEE: Please note that plan review fees for Life Safety, Structural, Site Development and Planning and Zoning will cover the initial review and up to two checksheets and the reviews of the applicant's responses to those checksheets. All additional checksheets and reviews of applicant responses will be charged an additional fee per checksheet.

Appeals: Pursuant to City Code Chapters 24.10, 25.07, 26.03, 27.02, and 28.03, you may appeal any code provision cited in this Checksheet to the BDS Administrative Board of Appeal within 180 calendar days of the review date. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appeals, call (503) 823-7300 or come in to the Development Services Center. Permit application expiration will not be extended pending resolution of any administrative appeal.

Life Safety Checksheet Response

Permit #: 19-109551-DFS-02-CO **Date: 02-14-2020**

Customer name and phone number: Luke Street 425-212-3813

Note: In the spaces below, please provide specific information concerning the changes that you have made in response to the checksheet. Note the checksheet item number, your response or a description of the revision, and the location of the change on the plans (i.e. page number and/or detail number). Use as many lines as needed. *If the item is not in response to a checksheet, write **"Applicant"** in the column labeled "Checksheet item number."*

Checksheet item number	Description of changes, corrections, additions, etc.	Location on plans
1	To use a column design for a horizontal orientated member wide flange beam	See attached Isolatek letter

Plan Bin Location: 51 CO w/ Approved Set rack 1

ISOLATEK® INTERNATIONAL
Corporate Headquarters

Isolatek International
41 Furnace Street
Stanhope, NJ 07874
Telephone: 973.347.1200

February 13, 2020

Mr. Luke Street
Norkote
2330 106th St SW
Everett, WA 98204

Re: Killingsworth – Portland

Dear Mr. Street:

This is in regard to the proposed application of our CAFCO® Spray Applied Fire Resistive Materials (SFRMs) for use on the referenced project.

It is our understanding that construction conditions exist where wood decking is being supported by steel beams that require a fire resistance rating.

We propose installing the CAFCO SFRM to the beams in accordance with the Underwriters Laboratories (UL) Column Designs for wide flange steel beams at the minimum thickness required to achieve the desired fire resistive rating. The thickness should be based on the W/D and A/P ratio of a 4-side exposed column. This thickness should be applied to any sides of the steel members that are exposed.

Note a column design is a worst-case scenario, determined from a 4-side exposure. Additionally, a column test does not provide the heat sink properties of a concrete floor assembly and has lower limiting temperatures under ANSI/ UL 263, ASTM E119 conditions.

Based on alternative method of testing in accordance with ASTM E119 item # 26 Conditions of Acceptance**,** the column thicknesses will provide a limiting average steel temperature of 1000 °F or a limiting individual steel temperature of 1200 °F at any single measured point. The results of the testing are within the UL Designs and are listed as thicknesses provided for the specific member sizes.

The proposed methods of application contained herein are being provided to assist the architect, owner and authority having jurisdiction to determine a suitable protection method for the non-conforming construction assembly. Authorities having jurisdiction should be consulted in all cases where approval is to be obtained for all installations that fall outside the scope of UL or design guidelines.

We trust this information is of assistance. Should you have any questions, please feel free to contact the undersigned at 973-347-1200.

Sincerely,

Cole Swanson
Technical / Marketing Specialist,
CAFCO® Fire Protection Products

CS
Cc: – T. Wildeboer - Isolatek International

333 Pfingsten Road
Northbrook, Illinois 6
(708) 272-8800
FAX No. (708) 272-8
MCI Mail No. 254-334
Cable ULINC NORTHB
Telex No. 650254334

JUN 2 1 1990

Underwriters Laboratories Inc.®

June 13, 1990

Mr. Rudy Jagnandan
Development Engineer
Isolatek International
Flanders Road
P. O. Box 478
Netcong, NJ 07857

Our Reference: R13348/90NK13398

Dear Mr. Jagnandan:

This is in response to your letter dated May 30, 1990, and to your request that Underwriters Laboratories Inc. undertake an investigation to determine the thickness of Type D-C/F Sprayed Fiber necessary to provide 1 and 2 h unrestrained ratings to structural steel beams supporting a wood joist and plywood roof assembly.

The concept of supporting a wood roof construction and designing the beams supporting same for 1 and 2 h unrestrained fire resistance appears to be contrary to the intent of overall fire protection.

However, in order to be responsive to your request, we offer the following comments. The proposed assembly has not been evaluated under fire test conditions and is addressed in an attempt to aid in the fire protection of the subject structure.

It is assumed that the entire surface of the beam would be exposed, with the exception of the wood joist bearing. If it can be assumed that when the roof collapses, the fire protection material is unaffected and the bearing areas on the upper flange provide adequate protection, the thickness of Type D-C/F sprayed fiber may be selected in accordance with the established thicknesses in Column Design No. X829.

We trust the above provides the requested information. However, should you have additional questions, please feel free to contact the undersigned.

Very truly yours,

ROBERT S. LUKASZ (EXT. 2661)
Senior Engineering Associate
Fire Protection Department

Reviewed by:

NESTOR G. SANCHEZ
Engineering Group Leader
Fire Protection Department

RSL:bm
/ltr/

333 Pfingsten Road
Northbrook, Illinois 60062-2096
(708) 272-8800
FAX No. (708) 272-8129
MCI Mail No. 254-3343
Cable ULINC NORTHBROOK, IL
Telex No. 6502543343

MAR 0 2 1992

Underwriters Laboratories Inc.®

February 28, 1992

Isolatek International
Mr. Rudy Jagnandan
41 Furnace Street
Stanhope, NJ 07874

Our Reference: Files R13348, 90NK13398

Subject: Steel Beams Supporting Wood Joist and Plywood Roof Systems

Dear Mr. Jagnandan:

This is to confirm our telephone conversation on February 27, 1992 relative to the protection of wide flange steel beams supporting wood joist and plywood roof systems.

Specific project conditions require that the beams be protected to provide 1 and two hour unrestrained beam ratings.

Since the entire beam surface would be exposed with the exception of the wood joist bearing, we have determined that the structural steel may be protected with Type D C/F sprayed fiber applied at thicknesses in accordance with the formula in column Design No. X829.

It should be understood that the performance of the wood joist and plywood roof system under fire test conditions has not investigated.

We trust the above answers your inquiry. However, if you should have any questions, please feel free to contact the writer.

Very truly yours,

NESTOR G. SANCHEZ
Engineering Group Leader
Engineering Services

Reviewed by:

RICHARD N. WALKE
Engineering Group Leader
Engineering Services

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