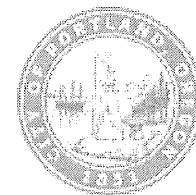


Development Services

From Concept to Construction

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

APPEAL SUMMARY

Status: Decision Rendered**Appeal ID:** 15818**Project Address:** 921 NW 21st Ave**Hearing Date:** 9/13/17**Appellant Name:** Joe Zody**Case No.:** B-007**Appellant Phone:** 503-327-0322**Appeal Type:** Building**Plans Examiner/Inspector:** Geoffrey Harker, John Butler**Project Type:** commercial**Stories:** 4 **Occupancy:** R-2, A-2, S-2 **Construction Type:** V-A**Building/Business Name:** 21 Astor**Fire Sprinklers:** Yes - Full Coverage**Appeal Involves:** Erection of a new structure**LUR or Permit Application No.:** 16-102461-CO**Plan Submitted Option:** pdf [File 1] [File 2] [File 3]**Proposed use:** Mixed Use / Multi Family

APPEAL INFORMATION SHEET

Appeal item 1

Code Section 705 Exterior Walls**Requires**

Code Section 705 Exterior walls require that we comply with Table 601 and 602 for exterior bearing and nonbearing walls.

We contend that our current design for the exterior wall, framing, and floor system meets the Type V-A, one-hour fire rating required by the code. This appeal is specifically speaking to the exterior walls along gridline A, 11, 4.2, and E between 2 and 4.2. All of these walls have a Fire Separation Distance greater than 30' and allow unlimited and unprotected openings. The building is fully sprinkled and has a fully addressable alarm system.

Proposed Design

We have submitted three PDF's:

Floor plans showing the first floor and typical upper floor that indicate the grid lines associated with the exterior walls in question.

A enlarged detail illustrating our typical exterior bearing wall / floor assembly condition.

A example of a similar accepted detail as supported by the Woodworks Wood Product Council.

Reason for alternative Alternative / Analysis:

We recently receive two check sheets that required that the exterior bearing walls be one hour. We contend that the current details satisfy all applicable code provisions and meet the one hour requirement. After I inquired with the plan reviewer (Mr. Harker) he identified the following items:

OSSC Section 705.6

The wall shall extend to the height required by Section 705.11 and shall have sufficient structural

stability such that it will remain in place for the duration of time indicated by the required fire-resistance rating.

He stated in an Email: "This is the crux of the matter. Though this section does not use the term "continuity," as other fire-resistance rated assemblies do, the rating of the exterior wall needs to be maintained, regardless of whether the floor/ceiling assembly is rated or not. In referring to 705.11, the rating needs to extend to the parapet and is not to be interrupted at floor lines."

OSSC 705.5

The required fire-resistance rating of exterior walls with a fire separation distance of greater than 10' shall be rated for exposure to fire from the inside.

He also stated the following: "Again, the exterior wall is required to be rated from the inside, which means a wall which means that a wallboard membrane is required to protect the wall within the floor/ceiling assembly."

Analysis:

Section 705.5: We agree that 705.5 states that with an FSD greater than 10 feet exterior walls only need to be rated from the inside. We take exception that this infers that "which means that a wallboard membrane is required to protect the wall within the floor/ceiling assembly." We contend that there are proven alternative methods supported by the code that allow compliance with Section 705.5 and 705.6

Section 705.6 calls for the wall to have sufficient structural stability to remain in place for the duration of time which, in our case, is one hour and is rated only for exposure from the interior. Nowhere in section 705.11 does the code speak to "not to be interrupted at floor lines." In addition, per exception #6 in 705.11 we are not required to have parapets on the exterior walls in question so we are unclear on how this has any bearing.

The concept of continuity is important in that there are many instances in the code such as Fire Walls, Fire Barriers, Smoke Barriers, and Smoke Partitions that do incorporate a paragraph that speaks specifically to continuity of those elements. Continuity is specifically omitted from Section 705 exterior bearing walls and as such it is incorrect in our opinion to assume it is required.

Moreover Section 705.6 goes on to state "Where exterior walls have a minimum fire separation distance of not less than 30 feet, interior structural elements which brace the exterior wall but which are not located within the plane of the exterior wall shall have the minimum fire-resistance rating required in Table 601 for that structural element." Therefore, while Section 705 does not address continuity it does have requirements that support and enhance the structural stability of the exterior wall. In our case the rated floor/ceiling and roof ceiling systems provide that lateral support.

All of our walls are 100% Fire Blocked in accordance with Section 718 as part of the rated assembly.

Finally, Section 707 Fire Barriers does address specific language regarding continuity through the floor system and Section 708 Fire Partitions allows stopping continuity at the rated floor system, while those elements do exist in the building, the exterior bearing walls in question are not classified as either of those elements. The IBC Commentary also supports this concept.

Alternate Example: We have included an excerpt of a detail provided by WoodWorks Wood Product Council that shows an accepted practice for a Type III typical 5 over 1 building. This clearly shows that the wall membrane stops at the rated ceiling system as an accepted practice in a building type that is a more restrictive rating than the proposed building.

Conclusion: We strongly believe that our proposed detail does provide the required protection for fire exposure from the interior and complies with the provisions of the code for structural stability

via support of the rated floor / ceiling and roof/ceiling assemblies for the required duration of the one-hour resistance for the exterior walls that have a FSD of greater than 30'.

APPEAL DECISION

Continuity of exterior fire rated walls at intersecting floor ceiling assemblies: Granted as proposed.

The Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

FLOOR PLAN LEGEND

WALL TYPE
FIRE EXTINGUISHER CABINET

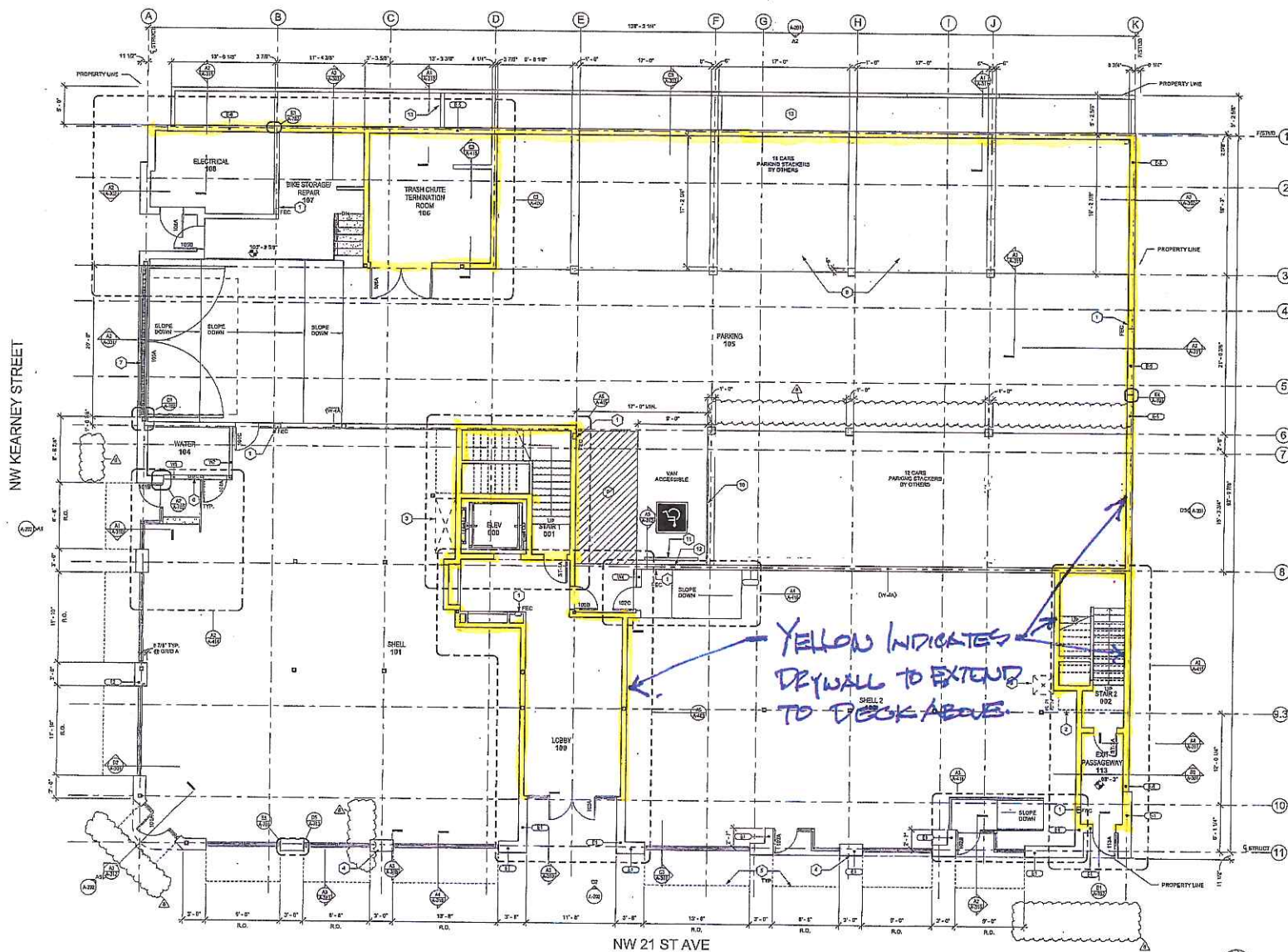
PARKING GARAGE GATE LOCATION
APPROVED PER DRIVEWAY DESIGN
EXCEPTION 16-115545-TR.

KEYNOTE LEGEND

- 1 RECESSED FIRE EXTINGUISHER 10480
- 2 LOW CEILING ABOVE, SEE A-111 FOR CEILING HEIGHTS
- 3 SHAFT ABOVE
- 4 RECESSED HOSE BIB LOCATED AT CENTER OF PILASTER
1'-0" ABOVE SIDEWALK U.G.A.
- 5 CANOPY ABOVE
- 6 DESIGN BUILD MEP SHOWN FOR COORDINATION ONLY -
SEE DESIGN BUILD MEP DIVISION FOR FURTHER INFO
- 7 TRENCH DRAIN-SEE DESIGN BUILD PLUMBING
- 8 PARKING STACKER - BY OTHERS
- 9 NO PARKING OR BLOCKING STRIPED AREA
- 10 FENCE/ALL PROTECTION BY PARKING STACKER
MANUFACTURER
- 11 CURB STOP
- 12 WALL MOUNTED ADA PARKING SIGN
- 13 8" CMU STORMWATER PLANTER PROPERTY LINE WALL -
SEE CIVIL/LANDSCAPE PLANS

FLOOR PLAN GENERAL NOTES

1. REFER TO ASSEMBLY SHEETS FOR WALL & FLOOR ASSEMBLIES.
2. STUD REEKS TYPICAL LIFT AND FINISHES. REFER TO STUD SCHEDULE ON
WALL ASSEMBLY SHEET FOR REQUIRED SIZES, GAUGES, SPACING, ELEVATIONS, REINFORCING AND
B.L.S. COORDINATE BRACING REQUIREMENTS FOR WALL AND TIE-BARS.
3. DIMENSIONS SHOWN ARE TO FACE OF CONCRETE BOARD FRAM, UNLESS OTHERWISE NOTED. REFER
TO ENLARGED PLANS FOR DIMENSIONS WITHIN THESE AREAS.
4. REFER TO ELEVATION ELEVATIONS FOR WINDOW TYPES.
5. VERIFY & CORRECT ALL DIMENSIONS & CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES
PRIOR TO START OF WORK.
6. DETAIL & KEYNOTE REFERENCES SHOULD BE APPLIED AT ALL INSTANCES WHERE THE SAME
CONDITIONS OCCUR.
7. CLEAR DIMENSIONING TAKE PRECEDENCE. DO NOT SCALE DRAWINGS TO DETERMINE SIZES.
8. FOR WALLS OF FLOOR ASSEMBLIES SEE SHEETS A-401 & A-402
9. FOR WINDOW & DOOR SCHEDULES SEE SHEETS A-401 & A-402
10. DOORS NOT DIMENSIONED ARE TO BE 4" FACE OF WALL TO FACE OF JAMB AT DOOR HINGE SIDE



1st FLOOR
9/11/16

NW 21 ST AVE

FFA
Architecture
+Interiors

FFA Architecture and Interiors, Inc.
3200 Yonge Street, Suite 100, North York, ON M2H 3P4
Phone: 416.223.1844 Fax: 416.223.1701
www.ffa.ca

ROBERT BALL
COMPANIES

ASTOR
PACIFIC LLC

Owner: EMPAR LLC



DESCRIPTION DATE

3 REV 3 4/18/16

7 REV 7 6/20/16

8 ASH-01_R1 11/02/2016

21 Astor

921 NW 21ST AVE, Fort Lauderdale, FL 33311

APPROVED:

DRAWN:

DATE: 6/20/2016

PROJECT NUMBER: 160916

FIRST FLOOR
PLAN

A-101
ISSUED FOR

FLOOR PLAN LEGEND

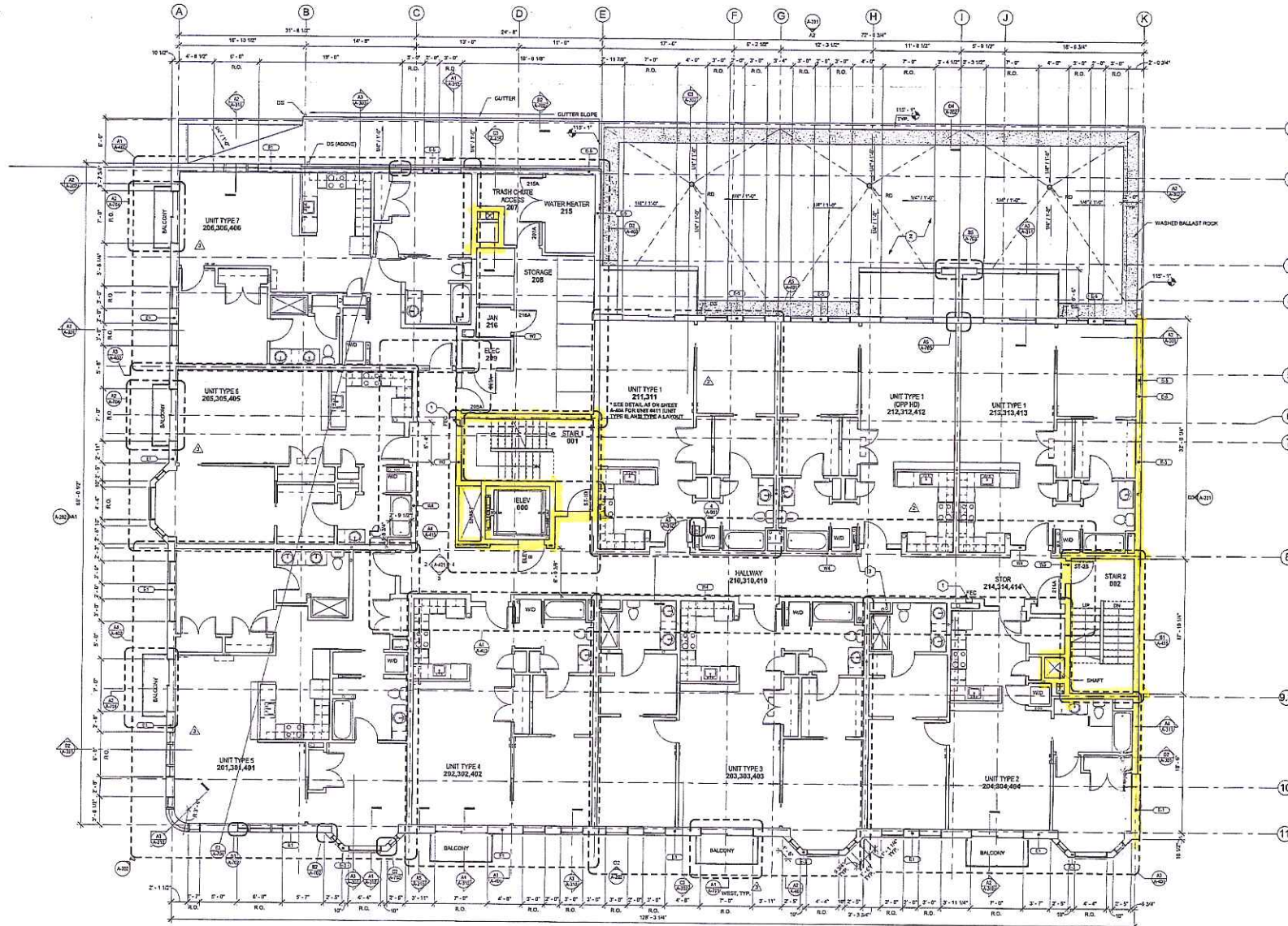
- WALL TYPE
- FIRE EXTINGUISHER CABINET

KEYNOTE LEGEND

- RECESSED FIRE EXTINGUISHER 104400
- ROOM OF ASSEMBLY PER K104002
- DESIGN BUILD MEP SHOWN FOR COORDINATION ONLY - SEE DESIGN BUILD MEP DWGS FOR FURTHER INFO

FLOOR PLAN GENERAL NOTES

- REFER TO ASSEMBLY SHEETS FOR WALL & FLOOR ASSEMBLIES.
- STUD SIZE TYPICALLY USED THROUGHOUT PROJECT AND SHOWN. REFER TO STUD SCHEDULE ON WALL ASSEMBLY SHEET FOR REQUIRED SIZES. GAUGES, SPACING, BLOCKING, HANGING AND COORDINATION.
- DIMENSIONS SHOWN ARE TO FACE OF STUD OR BOARD FINISH UNLESS OTHERWISE NOTED. REFER TO ENLARGED PLANS FOR DIMENSIONS WITHIN THOSE AREAS.
- REFER TO BUILDING ELEVATIONS FOR WINDOW TYPES.
- VERIFY & CORRECT ALL DIMENSIONS & CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- DETAIL & KEYNOTE REFERENCES SHOULD BE APPLIED AT ALL INSTANCES WHERE THE SAME CONDITIONS OCCUR.
- CLEAR DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS TO DETERMINE SIZES.
- FOR WALL/DOOR/FLOOR ASSEMBLIES SEE SHEETS A-901 & A-902.
- FOR WINDOW & DOOR SCHEDULES SEE SHEETS A-901 & A-902.
- DOORS NOT DIMENSIONED ARE TO BE 4" FACE OF WALL TO FACE OF JAMB AT DOOR HINGE SIDE.



A1 SECOND-FOURTH FLOOR PLAN
3/10/2016 4/10/2016 4/10/2016

FFA
Architecture
+Interiors

FFA Architecture and Interiors, Inc.
2200 N. Main Street, Suite 100, Portland, OR 97208
Phone: 503.222.3461 Fax: 503.222.0791
www.ffa-ai.com

ROBERT BALL
COMPANIES

ASTOR
PACIFIC LLC
Owner: EMPAR LLC

REGISTERED ARCHITECT
STATE OF OREGON

DESCRIPTION	DATE
2. REV 2	4/1/16
3. REV 3	4/18/16

21 Astor
821 NW 21ST AVE., Portland, OR 97209

APPROVED: _____
DRAWN: _____
DATE: 5/3/2016
PROJECT NUMBER: 10015

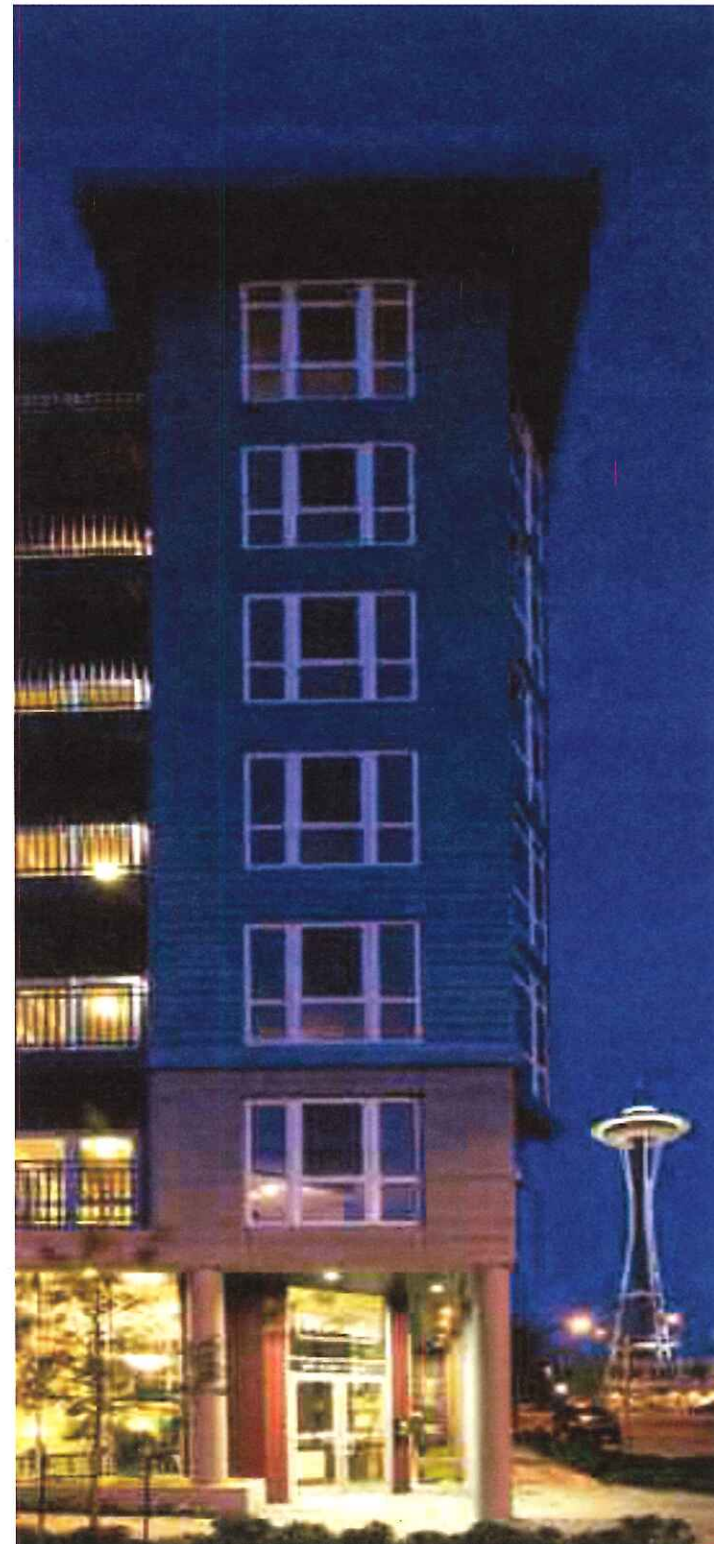
SECOND-FOURTH
FLOOR PLAN

A-102
ISSUED FOR



Practical, Code-Compliant Detailing for Mid-Rise Wood Structures

Detailing Considerations for Mid Rise Wood Frame Buildings



Exterior Walls – Intersecting Floors

Type III Construction – 2 HR Wall, 1 HR Floor
Semi-Balloon Framing

