

## **Board of Aldermen Request for Action**

## **MEETING DATE**: 10/15/2024

**DEPARTMENT:** Development

AGENDA ITEM: Resolution 1415, Site Plan Approval – Fairview Crossing Townhomes

## **REQUESTED BOARD ACTION:**

A motion to approve Resolution 1415, authorizing site plan approval for construction of 16 4-unit townhomes at 14601 North Fairview Drive.

## SUMMARY:

The applicant submitted a site plan application for construction of a new townhome development to include 16 buildings with four units each at 14601 North Fairview Drive.

The Fairview Crossing development has an approved stormwater plan that includes these 16 units and all infrastructure is constructed and approved. The proposal meets the applicable building design and coloration requirements, a substantial landscape plan, and is included in the currently approved TIS through MODOT and the City and is in full compliance.

After review at the October 8, 2024, Planning Commission meeting, the Commission recommended approval of the site plan as described in the staff report.

### **PREVIOUS ACTION:**

Fairview Crossing Preliminary Plat was approved in May of 2023, and the Final Plat for this lot is on tonight's agenda as well.

## **POLICY ISSUE:**

Complies with Codes

### FINANCIAL CONSIDERATIONS:

None anticipated.

## **ATTACHMENTS:**

□ Ordinance	Contract
⊠ Resolution	⊠ <u>Plans</u>
⊠ Staff Report	□ Minutes

Other: <u>Planning Commission meeting may be viewed online</u>.

## **RESOLUTION 1415**

## A RESOLUTION AUTHORIZING SITE PLAN APPROVAL FOR CONSTRUCTION OF 16 4-UNIT TOWNHOMES AT 14601 NORTH FAIRVIEW DRIVE

**WHEREAS**, the applicant submitted plans for construction of a new townhome development to be located at 14601 North Fairview Drive; and

**WHEREAS**, the Planning Commission reviewed the submittal concerning the layout, building materials and colors at its October 8, 2024 meeting; and

**WHEREAS**, the Planning Commission recommends approval of the site plan at 14601 North Fairview Drive for townhomes as described in the Staff Report.

## NOW THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI, AS FOLLOWS:

# THAT THE SITE PLAN APPLICATION FOR A NEW TOWNHOME DEVELOPMENT AT 14601 NORTH FAIRVIEW DRIVE.

**PASSED AND ADOPTED** by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 15<sup>th</sup> day of October, 2024.

Damien Boley, Mayor

ATTEST:

Linda Drummond, City Clerk



STAFF REPORT October 1, 2024 Site Plan Review of Parcel Id # 05-917-00-07-005.00

Application for a Site Plan Approval

Code Sections: 400.390 - 400.440

Site Plan Approval

Property Information:

Address: Owner: Current Zoning: 14601 N. Fairview Dr. (est.) KPI3 LLC R-3 (Conceptual Plan)

Application Date:

September 12, 2024

GENERAL DESCRIPTION:

Application to approve a site plan for the Fairview Townhomes project located within the Fairview Crossing development's Conceptual Overlay Plan. The application includes 16 4-unit townhomes (64 total units) on Lot 1 of the subdivision.

Section 400.410 Standard of Review

1. The extent to which the proposal conforms to these regulations. *See attached standards:* 

**400.415.B.18** - In developments proposed in a "R-3" District where the platting process is not implicated or required, the proposal must also show how the project meets the requirements for dedication or reservation of public open space as is described in Sections 425.200 — 425.230 of the City Code, which shall include payment in lieu of dedication requirements if no dedication or reservation is included or accepted. *The requirements of 425.200* –

425.230 are applicable to this development once the exact number of dwelling units is determined (by this approval) in order to calculate the park dedication requirements. In this case, there are no lands or greenspace not associated with stormwater drainage available in the entire development suitable for dedication, so the only compliance method is payment of fees in lieu of dedication. Those fees are \$625.00 per dwelling unit on 64 units (\$625 x 64) for a total fee of \$40,000,00. Payment of this amount shall be a condition of approval of the site plan and no building permit shall issue until such fee is paid.

## 400.419 Development Standards In "R-3" Districts.

A. Intent. All residential building and sites shall be constructed with materials that are durable, economically maintained and of a quality that will retain their appearance over time.

1. Building Materials. The materials used shall meet the intent of this Section by being of such quality, design and type that they will maintain their installed appearance overtime. These materials must be organized in a cohesive development pattern for each of the proposed buildings in the development area. *Exterior facades include LP Siding, Cultured Stone and/or Thin Brick on the front facades, with vinyl siding on sides and rear of buildings. Each building will have a similar design motif with varying complementary colors throughout.* 

2. Building Color. Color schemes shall tie building elements together, relate separate (freestanding) buildings within the same development to each other and shall be used to enhance the architectural form of a building. The principal color of all structures shall be generally earth tones, grays and blue-grays or combinations thereof. Intense, bright, black or fluorescent colors must be specifically requested and can only be approved by the Board of Aldermen and in no event shall they be the predominate color on any wall or roof. *Each building will have distinct earth toned color variations that separate and designate each dwelling unit along the rear vinyl sided areas to break up the units. The front façade has multiple materials and colors that enhance the architectural form.* 

3. Building Massing And Facade Treatment.

a. Variation In Massing. A single, large dominant building mass shall be avoided. *The single large massing of the building is eliminated by a combination*  of different colors of materials for each dwelling unit in the buildings, with gable end treatments added to two of the four units to further distinguish the individual units. The front facades are also broken up with varying colors and materials.

b. All building walls shall have horizontal and vertical architectural interest and variety to avoid the effect of a single, blank, long or massive wall with no relation to human scale. *The front facades have multiple vertical and horizontal breaks using different materials and the rear is treated with separate color for each unit.* 

4. Site Layout Principles. Access to the development should take into account the service level of the adjacent roadways and shield or buffer the residential buildings from traffic noise and conflicts associated with higher level roadways, building orientation. Access to the development will be by one larger collector street along the west edge, with multiple stub streets of a residential character, with all buildings oriented towards the residential streets.

a. All primary and pad site buildings shall be arranged and grouped so that their primary orientation complements adjacent and existing developments and either:

(1) Frames the corner of an adjacent street intersection; or Yes.

(2) Frames and encloses a "main street" pedestrian and/or vehicle access corridor within the development site; or *Yes*.

(3) Frames and encloses on at least three (3) sides parking areas, public spaces or other site amenities. *No*.

(4) Alternatives. An applicant may submit an alternative development pattern, provided such pattern achieves the intent of the above standards and this Section.

b. Parking Lot Layout.

(1) In order to reduce the scale of paved surfaces and to shorten the walking distance between the parked car and the building, off-street parking for all developments shall be located according to one (1) of the following: *The development is designed to work like a standard single-family development, with driveways leading to garages. There is no additional, separate parking areas for this development.* 

(a) A minimum of forty percent (40%) of the off-street parking spaces provided shall be located other than between a facade facing a public right-of-way and the public right-of-way (e.g., to the rear or side of the building); or

(b) More than sixty percent (60%) of the off-street parking spaces provided may be located between the front facade of the primary building(s) and the abutting street, provided the amount of interior and perimeter parking lot landscaping required is increased by fifty percent (50%) and the overall green space is increased by twenty-five percent (25%).

5. Lighting Standards. Since the development is primarily residential in nature, lighting shall be designed for safety as its' primary goal. To the extent the development is adjacent to residential uses other than "R-3," a photometric plan showing the development meets the off-site standards required of commercial developments in Section 400.430 is required. Parking lot lighting shall be limited to illuminating the parking areas without spilling over into other areas of the site or off-site. The height of light poles should be consistent with the overall development design, but in no event shall the lights be more than twenty (20) feet above adjacent grade. Building attached lighting shall be directed downward, and in no event should it be directed such that its glare is off-site. Pedestrian walkway lighting shall be such that it primarily illuminates the path(s) involved with generally low stature lights. If necessary or an integral part of the design of the development, taller lights may be installed, but in no event shall they exceed ten (10) feet from adjacent grade. *The street lighting will be to* current city standards for all streets – intersections and ends of roads will have lighting. The building lighting will be standard residential lighting as well to illuminate the porches and patios.

6. Landscaping Standards. To maintain the general residential feel of the development, landscaping should be designed in accordance with its location. In all developments, existing mature trees that are not required to be removed for construction should remain in place. The development should be buffered from adjacent roadways with either a combination of berms and medium stature trees, or without berms a combination of both higher stature trees and low standing non-deciduous trees or shrubs. Grouping or clustering such trees in a natural looking state is desired. In the event a building or parking area is adjacent to a public street, the landscape buffering requirements in Section 400.435(C)(3) shall be met. *The submitted landscaping plan meets the standards.* 

7. Pedestrian And Recreation Considerations. In addition to the considerations identified in Section 400.415(B)(18), above, all residential developments shall account for the recreational needs of the project residents as well as providing access to the public recreational offerings. In order to meet the public offering requirements, the standards in the Comprehensive Plan and Parks Master Plans of the City of Smithville shall be the prime consideration. *These factors were considered in the initial plan review of the conceptual plans, and these townhomes are complaint with the approved conceptual plan.* 

2. The extent to which the development would be compatible with the surrounding area. *The development would constitute a buffering development between the residential developments of Hills of Shannon and Estates of Wilkerson Creek to the east and northeast from the future commercial development to the west along 169 Highway. The building's façade treatments are such that they mimic single family detached residential in the coloration and materials use. Much of the developed area will be buffered by a large stand of trees surrounding a creek and drainage areas from the detached housing to the east and northeast.* 

3. The extent to which the proposal conforms to the provisions of the City's subdivision regulations concerning the design and layout of the development, as well as water system, sewer system, stormwater protection and street improvements. *The approved development was separately subject to the subdivision regulations and zoning regulations in the approval of the original Conceptual Plan Overlay approval in 2023, as well as the subdivision review of the city's Public Works Department and the City's Engineers.* 

4. The extent to which the proposal conforms to the policies and provisions of the City's Comprehensive Plan. *The development was designed with the Comprehensive Plan in mind and was separately and previously approved as compliant with the plan.* 

5. The extent to which the proposal conforms to the adopted engineering standards of the City. *The development's plans for infrastructure design and layout were individually reviewed and approved by the City's engineers and staff prior to construction.* 

6. The extent to which the locations of streets, paths, walkways and driveways are located so as to enhance safety and minimize any adverse traffic impact on the surrounding area. *The entire development (including Lot 1 herein) was subject to multiple traffic studies and reviews from both the city and MODOT engineers and was designed and laid out to meet both MODOT and City standards.* 

7. The extent to which the buildings, structures, walkways, roads, driveways, open space and parking areas have been located to achieve the following objectives:

a. Preserve existing off-site views and create desirable on-site views; The *original state of the property was untended growth of brush. Once removed, and as many of the mature trees that were salvageable were saved, the views were improved.* 

b. Conserve natural resources and amenities available on the site; The *existing mature trees, especially those adjacent to the drainage areas and property lines to the east, were saved to satisfy this item.* 

c. Minimize any adverse flood impact; The *development was subject to engineering review of all stormwater drainage and includes drainage structures that will reduce the overall impact of the development from pre-development standards.* 

d. Ensure that proposed structures are located on suitable soils; Limited *fills were needed in the development for habitable structures, and walls and compaction testing for the backfill behind them were all approved as suitable for the intended usage – particularly part of one road.* 

e. Minimize any adverse environmental impact; and The *design included saving valuable mature trees where possible, and stormwater detention structures built for the entire development drainage area, not just this portion of the overall design.* 

f. Minimize any present or future cost to the municipality and private providers of utilities in order to adequately provide public utility services to the site. *The project is designed to lessen the areas needed for utility services throughout the site, saving costs to all.* 

STAFF RECOMMENDATION:

Staff recommends APPROVAL of the proposed Site Plan with the condition that no permit shall be issued until the parks fees are paid.

Respectfully Submitted,

/s/

Director of Development



Group 3





Group 1



Group 2



UNIT SF MAIN FLOOR 634 SF SECOND FLOOR 974 SF GARAGE 387 SF PATIO 80 SF

UNIT SF MAIN FLOOR 530 SF SECOND FLOOR 778 SF GARAGE 272 SF PATIO 80 SF

BUILDING SF MAIN FLOOR 2328 SF SECOND FLOOR 3504 SF GARAGE 1318 SF PATIO 320 SF

FRONT ELEVATION UNIT SF MAIN FLOOR 634 SF SECOND FLOOR 974 SF GARAGE 387 SF PATIO 80 SF

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CS COVER SHEET A1 FRONT AND REAR ELEVATIONS A2 LEFT, RIGHT AND ROOF PLAN A3 FOUNDATION PLAN A4 FIRST FLOOR PLAN A5 SECOND FLOOR PLAN A6 WALL SECTIONS AND DETAILS A7 DETAILS A8 BRACE WALL DETAILS

UNIT SF MAIN FLOOR 530 SF SECOND FLOOR 778 SF GARAGE 272 SF PATIO 80 SF

TING VITH 2018 ENTIAL CODE , LOCAL NATIONAL ENERGY SING ENERGY RATING RS ) CODE, US ERN L RESI  $\smile$ A N ACC BUILD IN A INTERNAT CODES, AN CONSERVA INDEX OP HOMES FAIRVIEW CROSSING TOWN SMITHVILLE MO. SCALE 1/4" = 1-0 DATE

9-12-24

PLAN NO.

4299

SHEET NO.

CS





# SOFFIT SHALL BE RATED AND SAPARTED AT THE CNETER WALL

FRONT EL. SIDING CULTURED STONE, THIN BRICK, LP SIDING

# GUTTERS AND DOWN SPOUTS REQUIRED

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE , LOCAL CODES, AND 2021 INTERNATIONAL ENERGY CONSERVATION CODE, USING ENERGY RATING INDEX OPTION ( ERI/HERS )
FAIRVIEW CROSSING TOWNHOMES SMITHVILLE MO.
SCALE 1/4" = 1-0 DATE 9-12-24
PLAN NO. 4299
SHEET NO.
A1



SIDE TO SIDE 6/12

12" SOFFITS TYP.

PURLIN



1/8" = 1-0 VINYL SIDING

GUTTERS AND DOWN SPOUTS REQUIRED

FIREWALL NO HIP RIDGE OR RAFTERS TO GO THRU FIREWALLS TYP.

NOTE 4-0 SETBACK REQUIREMENTS FROM 2 HOUR FIRE RESISTANT WALLS FOR VENTS AND PENETRATIONS ON THE PLANS

# RAFTERS MAX. SPAN BETWEEN SUPPORTS 14-4



RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP. U.N.O. HIPS AND RIDGES 2 X 8 DF NO 2 U.N.O

PURLIN LEG O.C. SUPPORT 2 X 6 DF NO 2 4'-0" 2 X 8 DF NO 2 5'-4" 2 X 10 DF NO 2 8'-0" 2 X 12 DF NO 2 9'-6"

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SUPPORT LEG FOR PURLINS 2 X 4 8'-0" 2 X 4 W 2 X 4 T - BRACE 9'-7" 2 X 6 W 2 X 6 T - BRACE 17'-2" 2 X 8 W 2 X 6 T - BRACE 17'-4"

RAFTER TIES





TING I 2018 AL CODE , LOCAL ONAL ENERGY FENERGY RATING Ψ. E A A BUILD IN INTERNA CODES, A CONSERV INDEX O D A HOMES TOWN FAIRVIEW CROSSING SMITHVILLE MO. SCALE 1/4" = 1-0 DATE 9-12-24 PLAN NO. 4299 SHEET NO. A2







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![](_page_14_Figure_10.jpeg)

### **ROOF-CEILING CONSTRUCTION**

![](_page_15_Figure_1.jpeg)

![](_page_15_Figure_2.jpeg)

SHIP LAP SIDING EDGES MUST BE DOUBLE NAILED: ONE NAIL MUST BE PLACED IN THE UNDERLAP AND A SECOND NAIL MUST BE PLACED IN THE OVERLAP AT 6" O.C. UNDER AND OVER

## WALL PANEL LEGEND

WSP = WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8', NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL CS-WSP = CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8', NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL EC = END CONDITION CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8', NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL PFH= PORTAL FRAME WITH HOLD DOWN, MIN SHEATHING THICKNESS 7/16" NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D ( 2.5" X 0.131" ) GB= GYPSUM BOARD MIN 1/2" THICK NAILING 7" EDGES & FIELD WITH GYPSUM BOARD NAIL 0.0915 DIAMETER, 1-5/8" LONG 19/64" HEAD CS-PF= CONTINUOUSLY SHEATHED 7/16" WOOD SHEATHING MIN., PORTAL FRAME NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D ( 2.5" X 0.131" ) PFH= 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131")

CS-PF= 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131")

GB= 7" EDGES & FEILD WITH GYPSUM BOARD NAIL 0.0915 DIAMETER, 1-5/8" LONG 19/64" HEAD

WSP OR CS-WSP AND EC PANALS= 6" EDGES, 12" FEILD WITH 8 D ( 2.5" X 0.131") NAIL

WALL PANAL ATTACHMENT SCHEDULE

## SECOND FLOOR PLAN

SECOND FLOOR PLAN

TH 2018 TIAL CODE , LOCAL TIONAL ENERGY NG ENERGY RATING ΞÈ AT S) Н S A ≥m DE, U  $\Box \alpha$ Ξ Z S С И И И И x 2  $\square$ 11  $\smile$ α J N Z 0 Ŭ U V D IN R S O BUILD I INTERN CODES, CONSER INDEX

FAIRVIEW CROSSING TOWNHOME SMITHVILLE MO.

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SCALE 1/4" = 1-0

> DATE 9-12-24

PLAN NO.

4299

SHEET NO.

A5

![](_page_16_Figure_0.jpeg)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm a. Methods of bracing shall be as described in Section R602.10.4.

FIGURE R602.10.8.2(3) BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

EACH TOWNHOUSE SHALL BE CONSIDERED A SEPARATE BUILDING AND SHALL BE SEPERATED BY FIRE -RESISTANCE- RATED WALL ASSEMBLIES MEETING THE REQUIREMENTS FO SECTION R302-1 FOR EXTERIOR WALLS.

THERE ARE NO PLUMBING OR MECHANICAL ITEMS ALLOWED IN THE FIREWALL'S. IN ADDITION, BEAMS CANNOT BE CONTINUES THRU FIRE WALL

THE FIRE- RESISTANCE - RATED WALL OR ASSEMBLY SEPARATING TOWNHOUSES SHALL BE CONTINUOUS FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING, DECK OR SLAB. THE FIRE RESISTANCE RATING SHALL EXTEND THE FULL LENGTH OF THE WALL OR ASSEMBLY, INCLUDING WALL EXTENSIONS THROUHG AND SEPERATING ATTACHED ENCLOSED ACCESSORY STRUCTURES

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SOFFITS TO HAVE A 1 HR FIRE RESISTANCE RATING ON THE UNDERSIDE WHEN LOCATED BETWEEN 2 AND 5 FEET FROM A REAL OR IMAGINARY PROPERTY LINE WHERE NEEDED 5/8" TYPE X SHEET ROCK ON THE UNDER SIDE OF 2 X 4 @ 16" O.C. SOFFIT SUPPORT

![](_page_16_Figure_7.jpeg)

# PARTY WALLS BET UL FIRE WALL U

## UL Product **iQ**™

![](_page_16_Figure_10.jpeg)

![](_page_16_Figure_11.jpeg)

![](_page_16_Figure_12.jpeg)

 $\times$ 3/4" \_\_\_\_\_ 3/4" \_\_\_\_\_ 3/4" \_\_\_\_\_ AIR SPACE

SECTION B1-B1

THING 4-0 BOTH SIDES OF FIRE SHEET UNDER ROOF SHEATHING	
SECURE WHERE STEEL H TRACK 2" WIDE WITH NOM 1" LONG LEGS FORMED FROM NO. 25 MSG GALV STEEL BETWEEN PANALS AND SECURE WITH ALUMINUM ANGLE .049 IN. THICK, 2 IN WIDE WITH 2 IN. AND 2-1/2 IN. LEGS. CLIPS SECURED WITH TYPE S SCREWS 3/8" LONG TO "H" STUDS AND WITH 1-1/4 IN LONG SCREWS TO WOOD FRAMING THROUGH HOLES PROVIDED IN CLIP BOTH SIDES OF SHAFT WALL	
WHERE HIP / VALLEY COMES INTO FIRE WALL HAVE TO TERMINATE AND CONTINUE ON OTHER SIDE OFF FIREWALL	
2 X 4 STUDS 16" OC. TYP.	
2 X 6 CEILING JOISTS	
2 LAYERS 1" X 24" TYPE X GYPSUM PANALS FROM FOUNDATION TO ROOF TYP.	
SECURE WHERE STEEL H TRACK 2" WIDE WITH NOM 1" LONG LEGS FORMED FROM NO. 25 MSG GALV STEEL BETWEEN PANALS AND SECURE WITH ALUMINUM ANGLE .049 IN. THICK, 2 IN WIDE WITH 2 IN. AND 2-1/2 IN. LEGS. CLIPS SECURED WITH TYPE S SCREWS 3/8" LONG TO "H" STUDS AND WITH 1-1/4 IN LONG SCREWS TO WOOD FRAMING THROUGH HOLES PROVIDED IN CLIP BOTH SIDES OF SHAFT WALL TYP.	
2 LAYERS 1" X 24" TYPE X GYPSUM PANALS FROM FOUNDATION TO ROOF TYP.	
WHERE OVERALL HEIGHT FROM FLOOR TO ROOF IS OVER 23-0 BLOCK BETWEEN STUDS WHERE STEEL H TRACK 2" WIDE WITH NOM 1" LONG LEGS FORMED FROM NO. 25 MSG GALV STEEL BETWEEN PANALS AND SECURE 24" OC WITH ALUMINUM ANGLE .049 IN. THICK, 2 IN WIDE WITH 2 IN. AND 2-1/2 IN. LEGS. CLIPS SECURED WITH TYPE S SCREWS 3/8" LONG TO "H" STUDS AND WITH 1-1/4 IN LONG SCREWS TO WOOD FRAMING THROUGH HOLES PROVIDED IN CLIP TYP.	
U TRACK BOTTOM OF TWO LAYERS OF 1" ROCK	
SPREAD FOOTING	
TWEEN UNITS	
J+1	
SEPARATION WALL: (Non-bearing, Max Height - 66 ft - see Item 6)	

1. Steel Track — Floor, sidewall or top wall track. Nom 2 in. wide channel shaped with nom 1 in. long legs, formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.

2. Steel Studs --- "H" shaped studs formed from No. 25 MSG galv steel having an overall depth of approximately 2 in. and flange width 1-3/8 in.

3. Gypsum Board\* — Two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fit into "H" shaped studs. NATIONAL GYPSUM CO ---- Types FSW, FSW-B, FSW-7, FSW-9

PROTECTED WALL: (Bearing or Nonbearing Wall, as indicated in Items 4, 4A and 4B. When Bearing, Load Restricted for Canadian Applications — See Guide <u>BXUV7</u>.)

4. Air Space — Minimum 3/4-in. air space.

5. Wood Studs --- For Bearing or Nonbearing Wall Rating --- Nom 2 by 4 in. max spacing 24 in. OC. Studs cross braced at mid-height where necessary for clip attachment. Min 3/4 in. separation between wood framing and fire separation wall. Finish rating evaluated for wood studs only.

6D. Gypsum Board\* — As an alternate to Item 6 - Min 5/8 in. thick, min. 6 in. wide batten strips, applied on both sides of Steel Studs (Item 2) and horizontal back to back Steel Track (Item 1). Min. 5/8 in. thick, min. 3 in. wide batten strips applied on both sides of single Steel Track (Item 1) at perimeter of assembly. Batten strips secured to studs with 1-1/4 in. long Type S steel screws spaced 12 in. OC. Batten joints shall be butted tight to form a closed joint. As an option, entire sheet of gypsum board may be used in lieu of the battens. Clip placement as in item 7, 7A, 7B, or 7C. NATIONAL GYPSUM CO — Type FSW-3, FSW, FSW-6.

9. Non-Bearing Wall Partition Intersection - (Optional) Wall system consisting of nominal 2 by 4 in. stud or nominal 2 by 6 in stud Maximum one non-bearing wall partition intersection per stud cavity.

13. Caulking and Sealants\* — (Optional - Intended for use as an air barrier - Not evaluated as fireblocking) - A bead of sealant applied around the partition perimeter in the 3/4 in. air space between wood framing (Item 5) and shaftliner panels (Item 3) to create an air barrier. DUPONT DE NEMOURS, INC. --- Great Stuff Gaps & Cracks, Great Stuff Pro Gaps & Cracks, Great Stuff Pro Window & Door

ICP ADHESIVES & SEALANTS INC --- Handi-Foam Fireblock, Handi-Foam Fireblock West, and Fast Foam Fireblock

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SCALE 1/4" = 1-0

> DATE 9-12-24

PLAN NO.

4299

SHEET NO.

A-6

TEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE	SPACING AND LOCATION
		Roof	
1	Blocking between ceiling joists or rafters to top plate	4-8d box (2 <sup>1</sup> / <sub>2</sub> " × 0.113") or 3-8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 3-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 3-10d box $(3" \times 0.128")$ ; or 3-3" $\times 0.131"$ nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-10d box $(3'' \times 0.128'')$ ; or 3-16d common $(3^{1}/_{2}'' \times 0.162'')$ ; or 4-3'' $\times 0.131''$ nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or $1^{1}/_{4}$ " × 20 ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails $(3^{1}/_{2}" \times 0.135")$ ; or 3-10d common nails $(3" \times 0.148")$ ; or 4-10d box $(3" \times 0.128")$ ; or 4-3" $\times 0.131$ " nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss <sup>i</sup>
7	Roof rafters to ridge, valley or hip rafters or roof rafter	4-16d (3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
	to minimum 2" ridge beam	3-16d box 3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 2-16d common (3 <sup>1</sup> / <sub>2</sub> " × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
		Wall	•
		16d common $(3^{1}/_{2}'' \times 0.162'')$	24" o.c. face nail
8	Stud to stud (not at braced wall panels)	10d box $(3'' \times 0.128'')$ ; or 3'' $\times 0.131''$ nails	16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners	16d box $(3^{1}/_{2}" \times 0.135")$ ; or $3" \times 0.131"$ nails	12" o.c. face nail
	(at braced wall panels)	16d common $(3^{1}/_{2}" \times 0.162")$	16" o.c. face nail
10	Puilt up bagder (2" to 2" bagder with 1/ " apager)	16d common $(3^{1}/_{2}" \times 0.162")$	16" o.c. each edge face nail
10	built-up header (2 to 2 header with 72 spacer)	16d box $(3^{1}/_{2}" \times 0.135")$	12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2 <sup>1</sup> / <sub>2</sub> " × 0.113"); or 4-8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131"); or 4-10d box (3" × 0.128")	Toe nail
		16d common $(3^{1}/_{2}'' \times 0.162'')$	16" o.c. face nail
12	Top plate to top plate	10d box (3" × 0.128"); or 3" × 0.131" nails	12" o.c. face nail
13	Double top plate splice	8-16d common (3 <sup>1</sup> / <sub>2</sub> " × 0.162"); or 12-16d box (3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)

		TAUTENING CONEDULE	
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a, b, c</sup>	SPACING AND LOCATION
		16d common $(3^{1}/_{2}'' \times 0.162'')$	16" o.c. face nail
14	blocking (not at braced wall panels)	16d box $(3^{1}/_{2}" \times 0.135")$ ; or 3" × 0.131" nails	12" o.c. face nail
	Pottom plate to joint rim joint hand joint or	3-16d box $(3^{1}/_{2}" \times 0.135")$ ; or	3 each 16" o.c. face nail
15	blocking (at braced wall panel)	2-16d common $(3^{1}/_{2}" \times 0.162")$ ; or	2 each 16" o.c. face nail
	blocking (at braced wait parel)	$4-3'' \times 0.131''$ nails	4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 3-16d box $(3^{1}/_{2}" \times 0.135")$ ; or 4-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 4-10d box $(3" \times 0.128")$ ; or 4-3" $\times 0.131"$ nails	Toe nail
		3-16d box (3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 2-16d common (3 <sup>1</sup> / <sub>2</sub> " × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
17	Top plates, laps at corners and intersections	3-10d box $(3'' \times 0.128'')$ ; or 2-16d common $(3^{1}/_{2}'' \times 0.162'')$ ; or 3-3'' $\times 0.131''$ nails	Face nail
18	1" brace to each stud and plate	3-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 2-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 2-10d box $(3" \times 0.128")$ ; or 2 staples $1^{3}/_{4}"$	Face nail
19	$1'' \times 6''$ sheathing to each bearing	3-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 2-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 2-10d box $(3" \times 0.128")$ ; or 2 staples, 1" crown, 16 ga., $1^{3}/_{4}"$ long	Face nail
20	$1'' \times 8''$ and wider sheathing to each bearing	3-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 3-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 3-10d box $(3" \times 0.128")$ ; or 3 staples, 1" crown, 16 ga., $1^{3}/_{4}$ " long Wider than 1" × 8" 4-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 3-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 3-10d box $(3" \times 0.128")$ ; or 4 staples, 1" crown, 16 ga., $1^{3}/_{4}$ " long	Face nail
		Floor	
21	Joist to sill, top plate or girder	4-8d box (2 <sup>1</sup> / <sub>2</sub> " × 0.113"); or 3-8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
		8d box $(2^{i}/_{2}" \times 0.113")$	4" o.c. toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	6" o.c. toe nail
23	$1'' \times 6''$ subfloor or less to each joist	3-8d box $(2^{1}/_{2}" \times 0.113")$ ; or 2-8d common $(2^{1}/_{2}" \times 0.131")$ ; or 3-10d box $(3" \times 0.128")$ ; or 2 staples, 1" crown, 16 ga., $1^{3}/_{4}$ " long	Face nail
	L		

(continued

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## WALL CONSTRUCTION

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF F
		Floor
24	2" subfloor to joist or girder	3-16d box $(3^{1}/_{2}" \times 0.135")$ ; or 2-16d common $(3^{1}/_{2}" \times 0.162")$
25	2" planks (plank & beam—floor & roof)	3-16d box $(3^{1}/_{2}" \times 0.135")$ ; or 2-16d common $(3^{1}/_{2}" \times 0.162")$
26	Band or rim joist to joist	3-16d common $(3^{1}/_{2}" \times 0.162")$ 4-10 box $(3" \times 0.128")$ , or 4-3" $\times 0.131"$ nails; or 4-3" $\times 14$ ga. staples, $^{7}/_{16}"$ crow
		20d common (4" × 0.192"); or
27	Built-up girders and beams, 2-inch lumber	10d box (3" × 0.128"); or 3" × 0.131" nails
	layers	And: 2-20d common (4" × 0.192"); 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails
28	Ledger strip supporting joists or rafters	4-16d box (3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 3-16d common (3 <sup>1</sup> / <sub>2</sub> " × 0.162" 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails
29	Bridging or blocking to joist	2-10d box (3" × 0.128"), o (2 <sup>1</sup> / <sub>2</sub> " × 0.131"; or 2-3" ×
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AN TYPE OF FASTEN
	Wood structural panels, subfloor, roof ar [see Table R602.3(3) for	nd interior wall sheathing to framing r wood structural panel exterior wall
30	<sup>3</sup> / <sub>8</sub> " - <sup>1</sup> / <sub>2</sub> "	6d common $(2" \times 0.113")$ nail 8d common $(2^{1}/_{2"} \times 0.131")$ na 01 $(2^{3}/_{8"} \times 0.113")$ nail (roof) <sup>j</sup>
31	<sup>19</sup> / <sub>32</sub> " – 1"	8d common nail $(2^{1}/_{2}" \times 0.131)$ $(2^{3}/_{8}" \times 0.113")$ nail (roof) <sup>i</sup>
32	$1^{1}/_{8}^{"} - 1^{1}/_{4}^{"}$	10d common $(3'' \times 0.148'')$ na 8d $(2^{1}/_{2}'' \times 0.131'')$ deformed n
		Other wall sheathing <sup>9</sup>
33	<sup>1</sup> / <sub>2</sub> " structural cellulosic fiberboard sheathing	$1^{1}/_{2}$ " galvanized roofing nail, diameter, or $1^{1}/_{4}$ " long 16 ga. 1" crown
34	<sup>25</sup> / <sub>32</sub> " structural cellulosic fiberboard sheathing	$1^{3}/_{4}$ " galvanized roofing nail, or $1^{1}/_{2}$ " long 16 ga. staple with
35	<sup>1</sup> / <sub>2</sub> " gypsum sheathing <sup>d</sup>	$1^{1}/_{2}$ " galvanized roofing nail; $1^{1}/_{2}$ " long; $1^{1}/_{4}$ " screws, Type
36	<sup>5</sup> / <sub>8</sub> " gypsum sheathing <sup>d</sup>	$1^{3}/_{4}$ " galvanized roofing nail; $1^{5}/_{8}$ " long; $1^{5}/_{8}$ " screws, Type
	Wood structura	I panels, combination subfloor unde
37	$^{3}/_{4}$ " and less	6d deformed $(2'' \times 0.120'')$ na 8d common $(2^{1}/_{2}'' \times 0.131'')$ n
38	<sup>7</sup> / <sub>8</sub> " - 1"	8d common $(2^{1}/_{2}" \times 0.131")$ n 8d deformed $(2^{1}/_{2}" \times 0.120")$
39	1 <sup>1</sup> / <sub>8</sub> " - 1 <sup>1</sup> / <sub>4</sub> "	10d common $(3'' \times 0.148'')$ n 8d deformed $(2^{1}/_{2}'' \times 0.120'')$
39	$1^{1}/_{8}'' - 1^{1}/_{4}''$ 1 inch = 25.4 mm 1 foot = 304.8 mm 1 mile per h	8d deformed $(2^{1}/_{2}" \times 0.120)$ our = 0.447 m/s; 1 ksi = 6.895 MI

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## TABLE R602.3(1)-continued

(continued)

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### TABLE 602.3(1) FASTENING SCHEDULE-continued

NUMBER AND TYPE OF FASTENER <sup>6, b, c</sup>	SPACING AND I	LOCATION	
Floor			
16d box $(3^{1}/_{2}'' \times 0.135'')$ ; or 16d common $(3^{1}/_{2}'' \times 0.162'')$	Blind and fa	ace nail	
16d box (3 <sup>1</sup> / <sub>2</sub> " × 0.135"); or 16d common (3 <sup>1</sup> / <sub>2</sub> " × 0.162")	At each bearing, face nail		
16d common $(3^{1}/_{2}" \times 0.162")$ 10 box $(3" \times 0.128")$ , or $3" \times 0.131"$ nails; or $3" \times 14$ ga. staples, $7'_{16}"$ crown	End na	ail	
d common (4" × 0.192"); or	Nail each layer as fo at top and bottom at	ollows: 32" o.c. nd staggered.	
d box (3" × 0.128"); or × 0.131" nails	24" o.c. face nail at staggered on opposi	top and bottom ite sides	
nd: 20d common (4" × 0.192"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	Face nail at ends an	d at each splice	
16d box $(3^{1}/_{2}" \times 0.135")$ ; or 16d common $(3^{1}/_{2}" \times 0.162")$ ; or 10d box $(3" \times 0.128")$ ; or $3" \times 0.131"$ nails	At each joist or ra	after, face nail	
2-10d box (3" × 0.128"), or 2-8d common (2 <sup>1</sup> / <sub>2</sub> " × 0.131"; or 2-3" × 0.131") nails	Each end, toe nail		
	SPACING OF FASTENERS		
NUMBER AND TYPE OF FASTENER <sup>a, b, c</sup>	Edges (inches) <sup>h</sup>	Intermediate supports <sup>c, e</sup> (inches)	
erior wall sheathing to framing and particleboard wa d structural panel <i>exterior</i> wall sheathing to wall fra	all sheathing to framin ming]	g	
d common $(2'' \times 0.113'')$ nail (subfloor, wall) <sup>i</sup> d common $(2^{1}/_{2}'' \times 0.131'')$ nail (roof); or RSRS- t $(2^{3}/_{8}'' \times 0.113'')$ nail (roof) <sup>i</sup>	6	12 <sup>r</sup>	
d common nail $(2^{1}/_{2}" \times 0.131")$ ; or RSRS-01; ${}^{3}/_{8}" \times 0.113"$ ) nail (roof) <sup>i</sup>	6	12 <sup>f</sup>	
Od common $(3'' \times 0.148'')$ nail; or d $(2^{1}/_{2}'' \times 0.131'')$ deformed nail	6	12	
Other wall sheathing <sup>9</sup>			
1/2" galvanized roofing nail, $7/16$ " head ameter, or $1^{1}/4$ " long 16 ga. staple with $7/16$ " or " crown	3	6	
$\frac{7}{4}$ "galvanized roofing nail, $\frac{7}{16}$ " head diameter, $1\frac{1}{2}$ " long 16 ga. staple with $\frac{7}{16}$ " or 1" crown	3	6	
$l_2''$ galvanized roofing nail; staple galvanized, $l_2''$ long; $1^{1}l_4''$ screws, Type W or S	7	7	
$\frac{3}{4}_{4}''$ galvanized roofing nail; staple galvanized, $\frac{5}{8}_{8}''$ long; $1^{5}/_{8}''$ screws, Type W or S	7	7	
els, combination subfloor underlayment to framing			
d deformed $(2'' \times 0.120'')$ nail; or d common $(2^{1}/_{2}'' \times 0.131'')$ nail	6	12	
d common $(2^{1}/_{2}" \times 0.131")$ nail; or d deformed $(2^{1}/_{2}" \times 0.120")$ nail	6	12	
0d common $(3'' \times 0.148'')$ nail; or d deformed $(2^{1}/_{2}'' \times 0.120'')$ nail	6	12	

(continued)

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![](_page_17_Figure_19.jpeg)

THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED.

FROM THE FLOOR

WINDOWS ARE TO HAVE FALL PROTECTION PER IRC 312.2

S ш WOH TOWN SING νO Ó₹ FAIRVIEW CRO SMITHVILLE A G

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SCALE 1/4" = 1-0

> DATE 9-12-24

PLAN NO.

4299

SHEET NO.

A-7

![](_page_18_Figure_0.jpeg)

4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2 METHOD PFH-PORTAL FRAME WITH HOLD-DOWNS

FRONT ELEVATION

N. LENGTH OF PANEL PER TABLE R602.10.5

MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE'				
thod LIB <sup>b</sup>	Method QB	Methods DWB, WSP, SFB, PBS, FCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Methods CS-W8P, CS-G, C8-PF	
3.5	3.5	2.0	2.0	
6.5	6,5	3.5	3.5	
9.5	9.5	5.5	4.5	
12.5	12.5	7.0	6.0	
15.0	15.0	9.0	7.5	
18.0	18.0	10.5	9,0	
7.0	7.0	4.0	3.5	
12.5	12.5	7.5	6.5	
18.0	18.0	10.5	9.0	
23.5	23.5	13.5	11.5	
29.0	29.0	16.5	14.0	
34.5	34.5	20.0	17.0	
NP	10.0	6.0	5.0	
NP	18.5	11.0	9.0	
NP	27.0	15.5	13.0	
NP	35.0	20.0	17.0	
NP	43.0	24.5	21.0	
NP	51.0	29.0	25.0	

TABLE R602.10.4 BRACING METHODS							
				CONNECTION CRITERIA"			
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB	$1 \times 4$ wood or approved metal straps		Wood: 2-8d common nails or 3-8d (2 <sup>1</sup> / <sub>2</sub> " long x 0.113" dia.) nails	Wood: per stud and top and bottom plates		
	Let-in-bracing	maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	<sup>3</sup> / <sub>4</sub> " (1" nominal) for maximum 24" stud spacing		2-8d $(2^{1}/_{2}^{"} \log \times 0.113^{"} \text{ dia.})$ nails or 2 - $1^{3}/_{4}^{"} \log \text{ staples}$	Per stud		
ŀ	WSP	P	TERTITION	Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	3/ <sub>8</sub> "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
Intermittent Bracing Methods	BV-WSP <sup>*</sup> Wood structural panels with stone or masonry veneer (See Section R602, 10.6.5)	7/ <sub>16</sub> "	See Figure R602.10.6.5	8d common $(2^{1}/_{2}" \times 0.131)$ nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts		
	SFB Structural fiberboard sheathing	<sup>1</sup> / <sub>2</sub> " or <sup>25</sup> / <sub>32</sub> " for maximum 16" stud spacing		$1^{1}/_{2}^{"}$ long x 0.12" dia. (for $1^{1}/_{2}$ " thick sheathing) $1^{3}/_{4}$ " long x 0.12" dia. (for $2^{5}/_{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field		
	GB Gypsum board	1/2"		Nails or screws per Table R602.3(1) for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field		
	PBS Particleboard sheathing (See Section R605)	<sup>3</sup> / <sub>8</sub> " or <sup>1</sup> / <sub>2</sub> " for maximum 16" stud spacing		For ${}^{3}/{}_{8}$ ", 6d common (2" long × 0.113" dia.) nails For ${}^{1}/{}_{2}$ ", 8d common (2' ${}^{1}/{}_{2}$ " long × 0.131" dia.) nails	3" edges 6" field		
	PCP Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		$1^{1}/_{2}^{"}$ long, 11 gage, $7^{'}_{16}^{"}$ dia. head nails or $7^{'}_{8}^{"}$ long, 16 gage staples	6" o.c. on all framing members		
	HPS Hardboard panel siding	<sup>7</sup> / <sub>16</sub> " for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 <sup>1</sup> / <sub>2</sub> " penetration into studs	4" edges 8" field		
	ABW Alternate braced wall	<sup>3</sup> / <sub>8</sub> "		See Section R602.10.6.1	See Section R602.10.6.1		

## FOR PANEL SPLICE (IF NEEDED) ADJOINING PANEL EDGES SHALL MEET OVER AND BE FASTENED TO COMMON 8D COMMON OR GALV. BOX NAILS @ 6" O.C. AT PANEL EDGES. FOR SINGLE STORY AND @ 4 O.C. PANEL EDGES FOR THE FIRST OF 2 STORIES

STUDS UNDER HEADER AS REQUIRED

8D COMMON OR GALV. BOX NAILS @ 12" O.C. AT INTERIOR SUPPORTS

MIN. REINFORCING OF FOUNDATION. ONE #4 BAR TOP AND BOTTOM. LAP BARS 15" MINIMUM.

### MINIMUM FOOTING SIZE UNDER OPENING IS 12" X 12". A TURNED-DOWN SLAB SHALL BE PERMITTED AT DOOR

![](_page_18_Figure_12.jpeg)

SECTION

## BRACE WALL DETAILS WIND SPEED 115 MPH WIND EXPOSURE A SEISMIC DESIGN CAEGORY A

CS-PF

NP = Not Permitted.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.

### TABLE R602.10.5 MINIMUM LENGTH OF BRACED WALL PANELS MINIMUM LENGTH (inches) CONTRIBUTING LENGTH METHOD (See Table R602.10.4) (inches) Wali Height 8 feet | 9 feet | 10 feet | 11 feet | 12 feet Actual<sup>b</sup> 58 48 48 53 48 DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP Double sided = Actual 53 58 48 48 48 Single sided = $0.5 \times Actual$ GB Actual<sup>6</sup> 62 69 NP NP 55 LIB SDC A, B and C, ultimate 38 42 34 design wind speed < 140 mph 48 ABW SDC D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub>, ultimate NP NP 32 34 32 design wind speed < 140 mph Actual<sup>b</sup> 24 27 30 33 36 CS-G Adjacent clear opening height (inches) 24 27 30 33 36 26 27 30 33 36 27 27 30 33 36 ≤ 64 29 30 33 36 32 30 30 33 36 32 32 33 38 43 37 35 48 41 38 36 40 38 CS-WSP, CS-SFB 100 Actual<sup>b</sup> 43 40 39 104 46 43 41 108 -----43 112 116 120 124 128 132 136 66 140 72 144 Portal header height METHOD 8 feet 9 feet 10 feet 11 feet 12 feet (See Table R602,10.4) Supporting roof only 16 16 16 Note c Note c 48 Supporting one story and roof 24 24 24 Note c Note c PFH 1.5 × Actual<sup>b</sup> 24 27 30 Note d Note d SDC A, B and C 16 18 20 Note e Note e

SDC D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub> 16 18 20 Note e Note e

a. Linear interpolation shall be permitted.
b. Use the actual length where it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.

Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.
 Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

1.5 × Actual<sup>b</sup>

Actual<sup>b</sup>

![](_page_18_Figure_19.jpeg)

A - 8

![](_page_19_Figure_0.jpeg)

![](_page_20_Figure_0.jpeg)

![](_page_20_Figure_1.jpeg)

 $\frac{\text{LANDSCAPE PLAN}}{\text{SCALE: 1" = 30'}}$ 

LANDSCAPE REQUIREMENT SSection 400.435(C)(3)

In areas where the building is adjacent to the street, there shall be one (1) large stature deciduous tree or two (2) ornamental flowering trees for every seventy-five (75) linear feet and three (3) shrubs for every forty (40) linear feet of property line. Attractive clustering of the required plantings is encouraged.

## PLANTING GUIDE

SYMBOL	QUANT.	KEY	NAME	SIZE
·	11	TA	AMERICAN BASSWOOD LINDEN TILIA AMERICANA	3" CAL
•	5	RB	OKLAHOMA REDBUD CERCIS RENIFORMIS "OKLAHOMA"	3" CAL
·	133	EBW	DWARF ENGLISH BOXWOOD BUXUS SEMPERVIRENS "SUFFRUTICOSA"	#3 POT
a contraction of the second	15	SM	CADDO SUGAR MAPLE ACER SACCHARUM 'AUTUMN SPLEDOR'	3" CAL
	11	RO	RED OAK QUERCUS RUBRA	3" CAL

![](_page_20_Figure_7.jpeg)

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