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Age of Residents	Capability of Residents	Number of Residents		lents
		1-5	6-16	Over 16
2½ years or less	Not capable of self-preservation	R-3 or IRC	I-2	I-2
Over 2½ years	Capable of self-preservation	R-3 or IRC	R-4	I-1
Over 2½ years	Not capable of self-preservation	R-3 or IRC	I-2	I-2

٦

Age of Served Population	Capability of Served Population	Number of Served Population	
		1-5	More than 5
$2\frac{1}{2}$ years or less	Not capable of self-preservation	R-3 or IRC	I-4
Over 2½ years through 12th grade	Capable of self- preservation	R-3 or IRC	E*
Over 12th grade	Capable of self- preservation	R-3 or IRC	A-3
Over 2 <sup>1</sup> / <sub>2</sub> years	Not capable of self-preservation	R-3 or IRC	I-4







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COR EXAMPLE (if	ep 4: Look for Frontage Increase any)	•
	FRONTAGE INCREASE	
	Frontage (506.3) The Fast South West	
	Total Frontage (F)ft. Perimeter (P)ft.	
	Width of open space (W) =	
	Area Increase Factor due to frontage, $l_r = \_$ (506.3.3) $l_f = \begin{bmatrix} F \\ P \end{bmatrix} = 0.25 \end{bmatrix} \frac{W}{30}$	
	For SI: 1 inch - 25.4 mm, 1 foot - 304.8 mm.	
2		
2015 deter	ning Nonstructural Plan Reviews	61

Step 5: Verify Area Increase	es
ADMINISTRATION (Chapter 1)	
Complete contraction documents Signed/audod construction documents (1071, 1072) (1077, State laws un/)	
BUILDING PLANNING (Chapters 3, 4, 5, 6)	
OCCUPANCY CLASSIFICATION (302 - 312, 509, 509)	
Single Occupancy (Xot. 1) Incidental uses (Xot. 7 Able 508)	
Mised Occupancy (508.1) Accessory occupancies (508.2)	
GENERAL BUILDING LIMITATIONS (Chapters 5 & 6)	
Apply Case 1 to determine the allocated integrated area and permitted and or construction for the builting optimistic optimistic and and apply optimistic and and apply optimistic and apply optimistic application and applications and applications are applications and applications are applications and applications are application	
$\begin{array}{c} \label{eq:steps} \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{c} tabu$	
CASE 1 — SINGLE OCCUPANCY OR NONSEPARATED MIXED OCCUPANCES (XX8.3)	
carry tases so-s., so-4 and 200, Selently the advantage having and a so-the single ecceptory of the most restric- tory of the single ecceptory of the most restriction of the single ecceptory of the single ecceptory of the most restric- tion or availed that the should before given as the brief are sensitive brief and the single ecceptory of the most restric- tion or availed that the should before given as the brief are sensitive brief and the single ecceptory of the most restric- tion or availed that the should before given as the brief are sensitive brief and the single ecceptory of the most restriction of the single ecceptory of the single eccep	
DETERMINE CONSTRUCTION TYPE CHECK MAXMUM ALLONABLE AREA (506.2.3)	
Actual: bolding area 1 <sup>47</sup> Total floor area (all activity)1 <sup>40</sup> Tabular attionment area (A) 1 <sup>46</sup> Manyment and analogues in a services	
Tabletar allowance area for nonspiritikend the second processing of the	
Altowalski kulding area. A A unity // P	
Actual building height Compliance verified	
Allowable building heightstortstortes Permited heres of construction	
Type of construction assumed by the second sec	
2015 IBC® Performing Nonstructural Plan Reviews	62








































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Fire Separation Distance	Degree of Protection	Allowable Area
	Unprotected, Non-Sprinklered	Not Permitted
0 to < 3 ft	Unprotected, Sprinklers	Not Permitted
	Protected	Not Permitted
5 to <10 feet	Unprotected, Non-Sprinklered	10%
	Unprotected, Sprinklers	25%
	Protected	25%
	Unprotected, Non-Sprinklered	25%
15 to < 20 feet	Unprotected, Sprinklers	75%
	Protected	75%





























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ACT		Comment: Fire Walls	;
	No.	Description	Code Section
	1	Details and documentation must be submitted verifying that the fire wall has sufficient structural stability under fire conditions.	703.2
	2	Details of all connections between the wall and other building elements must be submitted.	706.2
	3	The wall must be continuous from the foundation to 30 inches above the combustible roof surface or the roof construction must be revised in accordance with the permitted alternatives.*	706.4, 706.6, Table 706.4
, v	4	The fire wall is required to have a 3-hour fire-resistance rating. Drawings shall indicate documentation that supports the required rating, such as a tested-design number or prescriptive design.	Table 706.4 Table 721.1(2)
2015 corre	2015	BC® Performing Nonstructural Plan Reviews	101









REFER YO	Tab	le	è	5	<b>0</b>	<b>8</b>	D SEF		TABL	E 508. DF OC	4 CUPA	NCIE	S (HO	URS)							
CODE BOOK	OCCURANCY	A,	E	l-1ª, l	-3, I-4	ŀ	2	F	a.	F-2, S	-2 <sup>b</sup> , U	B <sup>e</sup> , F	-1, M, -1	н	-1	н	-2	H-3,	H-4	н	-5
0045 100	OCCOPANCE	s	NS	s	NS	S	NS	S	NS	s	NS	s	NS	s	NS	s	NS	s	NS	s	NS
2015 IBC	A, E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3	2	NP
Table 508.4	I-1 <sup>a</sup> , I-3, I-4	—	—	N	Ν	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP	2	NP
Page 108	I-2	-	—	-	—	Ν	Ν	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP	2	NP
5	Ra	-	-	-	-	-	-	N	N	1 <sup>c</sup>	2 <sup>c</sup>	1	2	NP	NP	3	NP	2	NP	2	NP
	F-2, S-2 <sup>b</sup> , U	-	-	-	-	-	-	-	_	N	N	1	2	NP	NP	3	4	2	3	2	NP
	B <sup>e</sup> , F-1, M, S-1	-	-	-	-	-	-	-	_	_	-	N	N	NP	NP	2	3	1	2	1	NP
	H-1	-	-	-	-	-	-	-	_	_	-	_	-	N	NP	NP	NP	NP	NP	NP	NP
	H-2	-	-	-	_	_	_	-	-	-	-	-	-	-	-	N	NP	1	NP	1	NP
	H-3, H-4	-	-	-	-	-	-	-	_	_	-	_	-	-	-	-		10	NP	1	NP
	H-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	NP
	NS = Buildings not equip N = No separation requir NP = Not permitted. a See Section 420. b. The required separatio c. See Section 406.3.4. d. Separation is not requi e. See Section 422.2 for a	n from red bet	areas a ween o tory ca	ut with used or occupa ure faci	an aut ly for ncies o lities.	omatic private f the sa	or ple:	ler sys asure v ssifica	tem in: rehicles tion.	stalled s shall l	in acco	ordance	with S	but no	903.3.	1.1. ss than	1 hour				
2015 IBC	® Performing Nonstr	uctur	al Pla	n Rev	riews															10	06

Table 707.3.10: Fire Area						
Occupancy Classification	Fire-Resistance Rating (Hours)					
H-1, H-2	4					
F-1, H-3, S-1	3					
A, B, E, F-2, H-4, H-5, I, M, R, S-2	2					
U	1					
<i>u</i>						
2015 IBC® Performing Nonstructural Plan Reviews	1					





A	Comment: Fire Barriers							
		Correction List						
	No.	Description	Code Section					
	1	Separation between Group R-3 and Group B is required to be minimum one-hour fire-resistance rated. Separation must be two hours if entire building is not fully sprinklered in accordance with IBC §903.3.1.1 (NFPA 13).	508.4 Table 508.4					
	2							
2015		2015 IBC® Performing Nonstructural Plan Reviews	110					









REFER TO TO CODE BOOK	able 10 <sup>4</sup>	TABLE 10 DOR FIRE-RESIS	Corr	idor:	S
2015 IBC Table		OCCUPANT	REQUIRED FIRE RATING (	-RESISTANCE (hours)	
1020.1 Page 278	OCCUPANCY	LOAD SERVED BY CORRIDOR	Without sprinkler system	With sprinkler system <sup>c</sup>	
r ugo 210	H-1, H-2, H-3	All	Not Permitted	1	
	H-4, H-5	Greater than 30	Not Permitted	1	
	A, B, E, F, M, S, U	Greater than 30	1	0	
	R	Greater than 10	Not Permitted	0.5	
	I-2ª, I-4	All	Not Permitted	0	
	I-1, I-3	All	Not Permitted	1 <sup>b</sup>	
	<ul> <li>a. For requirements 407.3.</li> <li>b. For a reduction in see Section 408.8.</li> <li>c. Buildings equippe accordance with S</li> </ul>	for occupancies in the <i>fire-resistance</i> ed throughout with ection 903.3.1.1 or	Group I-2, see Se rating for occupan an automatic sp 903.3.1.2 where a	ections 407.2 and cies in Group I-3, <i>rinkler system</i> in llowed.	
2015 unor 2015 IBC® Perform	ning Nonstructural Plan Reviews				115









AC		Comments: Fire Par	tition
	No	Correction List	Codo Soction
	NO.	Description	Code Section
	1	The ½-hour rating for the Group R-1 occupancy is permitted if the building is fully sprinklered in accordance with NFPA 13, otherwise a one-hour rating is necessary. Please address on the resubmittal.	Table 1018.1.
2015 em	2015	5 IBC® Performing Nonstructural Plan Reviews	119



## **Smoke Barriers**

- Underground buildings.
- Group I-1, condition 2, I-2 and I-3 occupancies.

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- Ambulatory care facilities.
- Areas of refuge.

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• Fire service access elevator and occupant evacuation elevator lobbies.

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A	CTIVIT	Comment: Floor Asse	mblies
	No.	Correction List	Code Section
	1	Openings between and among floors are limited based on occupancy classification and use (See also IBC 1019.3). Please have the applicant address this on the resubmittal.	712.1.9
20:5		2015 IBC® Performing Nonstructural Plan Reviews	135








































Classification	Flame-Spread Index (FSI)	Smoke Development Index (SDI)
Class A (also referred to as Class 1)	0-25	450 Maximum
Class B (also referred to as Class 2)	26-75	450 Maximum
Class C (also referred to as Class 3)	76-200	450 Maximum

REFER TO WITCH INNEL CODE BOOK	Со	<b>mpar</b>	TABL	E 803.11 SH REQUIR	ANS	PANCY <sup>k</sup>	
2015 IBC		SPRINKLERED			NONSPRINKLERED		
Table 803.11 Page 205	GROUP	Interior exit stairways and ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces°	Interior exit stairways and ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces°
Fage 200	A-1 & A-2	В	В	С	А	A <sup>d</sup>	Be
	A-3 <sup>f</sup> , A-4, A-5	В	В	С	А	A <sup>d</sup>	С
	B, E, M, R-1	В	С	С	А	В	С
	R-4	В	С	С	А	В	В
	F	С	С	С	В	С	С
	Н	В	В	Cg	А	А	В
	I-1	В	С	С	А	В	В
	I-2	В	В	B <sup>h, i</sup>	А	А	В
	I-3	А	Aj	С	А	А	В
	I-4	В	В	B <sup>h, i</sup>	А	А	В
	R-2	С	С	С	В	В	С
	R-3	С	С	С	С	С	С
	S	С	С	С	В	В	С
2	U	No	restrictions		No	restrictions	
2015 emer	C® Performing Nor	nstructural Plan Review	/S				156











ACTI	VITY	Comment: Interior Fin	ishes
		Correction List	
No	0.	Description	Code Section
1		Indicate the flame-spread and smoke developed indices for the corridor wainscoting in accordance with ASTM E 84. Not less than Class A is required.	803.1.1, Table 803.11
2015 statute 	20	15 IBC® Performing Nonstructural Plan Reviews	161







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ACTIVITY	Desig	n Occup	oant Lo	oad
Occupancy	Use	Table 1004.1.2 Factor	Area (sq.ft.)	Design Occupant Load
	Bookkeeping	100 sq. ft./person	160	16
0 5	Open office	100 sq. ft./person	640	64
Group B	Offices	100 sq. ft./person	1,000	100
	Corridor	??	200	0
		Total	2,000	180
×				
2015 centre 2015 IBC	® Performing Nonstructural P	lan Reviews		172



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P	CTIVIT	Number of Exits	
		Correction List	
	No.	Description	Code Section
	1	Provide an additional means of egress door or relocate door such that the common path of egress travel distance does not exceed 75 feet.	1006.3.2 Table 1006.3.2(2)
	S		
2015		2015 IBC® Performing Nonstructural Plan Reviews	183





















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AC	TIVITY	Comments: Stairs	
		Correction List	
	No.	Description	Code Section
	1	Provide stairway tread and risers which meet the limiting dimensions in the referenced code section.	1011.5.2
	2	Provide handrails on both sides of stairway at the required height.	1011.11
	3	Revise guard detail to meet the required opening limitations and height as stated in the referenced sections.	1011.13, 1014
	4	Provide handrails on both sides of stairway at the required height.	1015.3 1015.4
La Car	1		
2015 cm	2015	IBC® Performing Nonstructural Plan Reviews	206















P		Comment: Sprinkler S	System
		Correction List	
	No.	Description	Code Section
	1	The basement must be provided with sprinklers throughout since the lineal distance between adjacent openings in the north wall exceeds 50 feet	903.2.11.1
201	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2015 IBC® Performing Nonstructural Plan Reviews	213



Sprinkler Design				
Standard	Description	Code Section		
13	Primarily property protection for fire control or suppression. Standard, CMSA or ESFR sprinklers. Use primarily non-residential but may occur in R occupancies when area and height are issue.	903.3.1.1		
13R	Primarily life safety in multi-family occupancies up to and including four stories. Requires residential or quick-response sprinklers. Limited water supply (30 minutes)	903.3.1.2		
13D	Primarily life safety in one- and two-family and townhouses. Requires residential or quick- response sprinklers. Limited water supply (10 minutes)	903.3.1.3		






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AG		Standpipe System	
	No	Correction List	Code Section
	1	Hose connections are required adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or corridor to the mall.	402.7.1, 905.3.3, 905.4
2015		2015 IBC® Performing Nonstructural Plan Reviews	225















2015 IBC Performing Nonstructural Plan Reviews



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## Summary

- You should be better able to:
  - Comply with applicable 2015 IBC standards regarding nonstructural plan reviews.
  - Perform a building plan review.
  - Perform fire-resistance-rated construction and interior finish reviews.

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- Perform means of egress reviews.
- Perform fire protection system reviews.

2015 IBC® Performing Nonstructural Plan Reviews

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