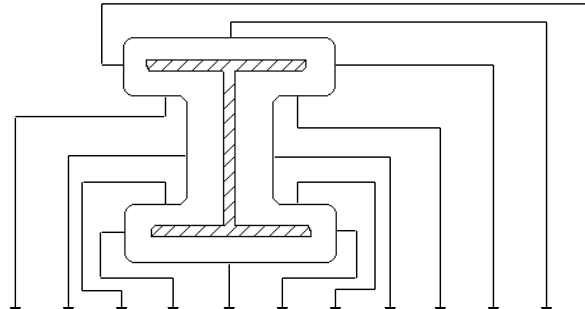




SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote Z-106/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 12/26/16



Floor No.	Column/Beam No.	Type	Test Date	Spec.													Averages				
					1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
1st Floor Frame / Basement	B(-15'), 2 to 3-lines	W14x22	1/3/17	2.125	3.250	2.313	3.500	2.000	2.188	2.188	2.250	2.188	2.563						2.272	2.078	2.229
1st Floor Frame / Basement	A to B on 2-line	W18x40	1/3/17	1.813	2.063	2.125	1.750	1.750	2.000	1.875	2.125	2.500	2.063						2.027	1.844	1.986
1st Floor Frame / Basement	B-line, 1.2 to 2-lines	W16x26	1/3/17	2.125	2.000	2.438	3.125	1.750	2.375	1.625	1.875	2.313	1.750						2.179	1.797	2.094
1st Floor Frame / Basement	B(+7'), 2 to 3-lines	W14x22	1/3/17	2.125	2.250	2.688	3.000	1.688	2.188	2.250	1.875	2.375	2.375						2.268	1.984	2.205
1st Floor Frame / Basement	C.8-line, 4 to 4(+20')	W16x31	1/3/17	1.938	2.000	2.250	2.000	1.375	1.875	1.250	1.563	2.250	2.125						2.058	1.438	1.920
1st Floor Frame / Basement	A to B on 5.9-line	W18x40	1/3/17	1.813	2.000	1.938	2.625	1.250	2.000	1.625	1.563	1.750	2.250						1.915	1.475	1.817

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Member Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)
1/3/17	Basement	Column	B/2	2.740	48.000	22	22

ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)
	Basement	W14x22	2-3, A.1(+8)				2000

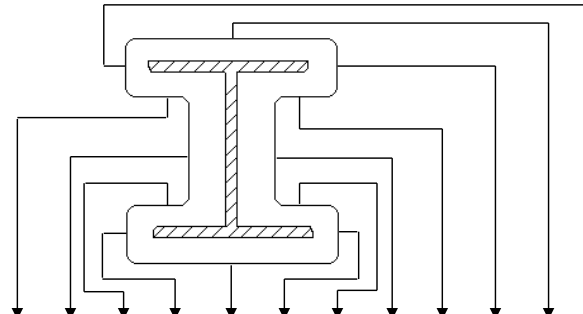
Comments: 1/2 flange thickness design. Adhesion/cohesion will be finalized after fireproofing cures as scheduled by Landry-French.

Sampled by: K. Gimpel
Reviewed by: RED



SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote Z-106/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 12/26/16



Floor No.	Column/Beam No.	Type	Test Date	Spec.													Averages				
					1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
1st Floor Frame / Basement	B(-8'), 4 to 5-lines	W14x22	1/3/17	2.125	2.125	2.000	3.500	1.125	1.563	1.500	2.125	2.250	2.000						2.125	1.234	1.927
1st Floor Frame / Basement	A to B on 5-line	W18x46	1/3/17	1.625	1.500	2.125	1.750	1.188	1.750	1.625	1.625	2.000	1.875						1.768	1.469	1.701
1st Floor Frame / Basement	B-line, 5 to 6.1-lines	W21x44	1/3/17	1.813	1.625	1.563	1.938	1.563	2.000	1.438	2.000	1.875	2.000						1.911	1.547	1.830
1st Floor Frame / Basement	B(+15'), 5 to 5.9-line	W21x44	1/3/17	1.813	2.250	2.813	1.563	1.500	1.563	1.188	2.000	1.750	1.625						1.880	1.391	1.771
1st Floor Frame / Basement	D(-7'), 5.5 to 5.9-line	W14x22	1/3/17	2.125	2.125	2.375	2.750	1.688	2.000	1.625	1.875	2.000	2.063						2.161	1.703	2.059

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Member Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)

ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)

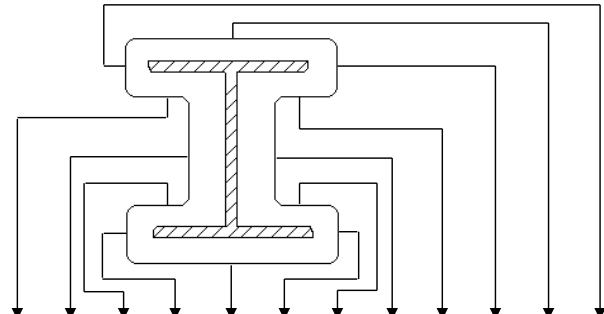
Comments: 1/2 flange thickness design

Sampled by: K. Gimpel
Reviewed by: RED



SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote MK-6/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 1/9/17



Floor No.	Column/Beam No.	Type	Test Date	Spec.													Averages				
					1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A to B on 4-line	W14x22	1/12/17	2.125	2.313	2.313	2.063	1.375	2.063	1.438	2.563	2.188	2.500						2.259	1.438	2.076
2nd Floor Framing	A to B on 5-line	W24x55	1/12/17	1.688	1.750	2.125	2.063	1.500	1.875	1.625	2.250	2.500	2.125						1.920	1.563	1.840
2nd Floor Framing	A to B on 5(+7.5')	W16x26	1/12/17	2.125	2.063	2.563	2.000	1.375	2.125	1.625	2.313	2.250	1.875						2.152	1.469	2.000
2nd Floor Framing	Column A/5.9	W10x45	1/16/17	2.063	2.250	2.313	2.188	1.188	2.625	1.688	2.375	2.250	2.250	1.750	2.063	1.625			2.266	1.570	2.034
2nd Floor Framing	B to D on 5.8(-8')	W16x26	1/13/17	2.125	3.250	2.875	2.125	1.500	2.375	1.750	2.125	2.500	2.313						2.263	1.719	2.142
2nd Floor Framing	B-line, 5 to 5.8	W24x94	1/13/17	1.313	1.438	2.000	2.750	1.500	2.563	1.125	2.500	2.375	2.250						1.554	1.313	1.500

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Member Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)
1/13/17	2nd Frame	W24x55	A-B on 4(+6')	2.260	48.000	17	15

ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)
1/13/17	2nd Frame	W24x55	A-B on 4(+6')				

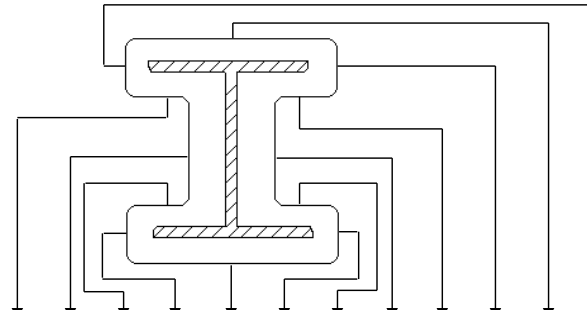
Comments: 1/2 flange thickness design. Adhesion/cohesion will be finalized after fireproofing cures as scheduled by Landry-French

Sampled by: K. Gimpel
Reviewed by: RED



SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote MK-6/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 1/9/17



Floor No.	Column/Beam No.	Type	Test Date	Spec.	Averages												Faces	Flange Tips	Total	
					1	2	3	4	5	6	7	8	9	10*	11*	12*				
2nd Floor Framing	B to C on 5-line	W18x40	1/13/17	1.813	2.125	3.000	2.500	1.563	2.438	1.375	2.938	2.750	2.625					2.063	1.531	1.944
2nd Floor Framing	C.8-line, stair to elevator	W21x44	1/13/17	1.813	4.000	2.875	2.438	1.188	2.250	2.063	2.000	2.000	3.125					2.041	1.641	1.952
2nd Floor Framing	B to C.8 on 4-line	W14x22	1/13/17	2.125	3.188	2.438	1.813	1.875	2.500	1.438	2.625	2.438	2.438					2.286	1.625	2.139
2nd Floor Framing	B to C.1 on 3-line	W18x35	1/13/17	1.938	3.375	2.750	2.375	1.250	3.250	2.125	2.500	2.750	2.250					2.183	1.719	2.080
2nd Floor Framing	Column A/3	W10x45	1/13/17	2.063	2.500	2.188	2.438	1.250	2.313	1.625	2.313	2.375	1.750	1.250	2.250	1.750		2.172	1.461	1.935
2nd Floor Framing	B to C on 2-line	W12x16	1/13/17	2.313	3.000	2.625	2.188	1.813	2.563	2.125	2.563	2.688	2.375					2.473	1.969	2.361

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)

ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)

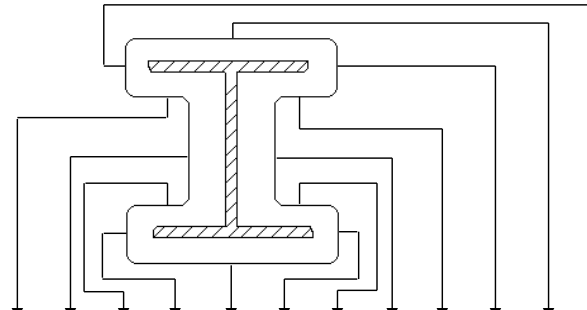
Comments: 1/2 flange thickness design

Sampled by: K. Gimpel
Reviewed by: RED



SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote MK-6/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 1/9/17



Floor No.	Column/Beam No.	Type	Test Date	Spec.													Averages				
					1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A.8 to C on 1.1-line	W18x35	1/13/17	1.938	2.250	2.500	2.500	1.313	2.125	2.000	2.250	2.500	2.688						2.174	1.719	2.073
					2.125	2.375	2.188	1.375	2.125	2.500	2.313	2.750	2.813								
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A.8-line, 1.2 to 2-line	W24x76	1/13/17	1.500	2.875	1.875	2.813	1.688	2.125	1.063	2.688	3.313	2.563						1.750	1.406	1.674
					2.750	2.000	2.938	1.750	2.375	1.125	2.125	3.000	2.500								
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A.1 to A.8 on 1.8-line(-8')	W12x16	1/13/17	2.313	3.000	3.000	2.750	2.000	2.688	3.063	2.875	3.000	3.063						2.536	2.313	2.486
					3.625	3.250	2.875	2.125	2.563	3.188	3.000	2.563	2.188								
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A.1 to B on 2-line	W24x62	1/13/17	1.563	2.375	2.125	1.875	1.750	2.813	1.625	2.125	2.250	2.000						1.813	1.719	1.792
					2.250	2.375	2.563	1.688	2.938	1.813	2.250	2.688	2.188								
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	A.1 to B, 3-line(-7')	W14x22	1/13/17	2.125	2.688	2.875	2.063	1.250	2.375	1.688	2.375	3.188	3.125						2.344	1.516	2.160
					2.500	3.125	2.250	1.375	2.563	1.750	2.438	3.125	3.375								
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total		
2nd Floor Framing	C.1 to E on 2-line(+10')	W10x12	1/13/17	2.438	3.000	2.813	2.500	2.000	2.750	1.688	2.500	2.438	3.250						2.634	1.906	2.472
					2.563	2.938	2.750	2.125	2.875	1.813	2.688	2.750	3.063								

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Member Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)

ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)

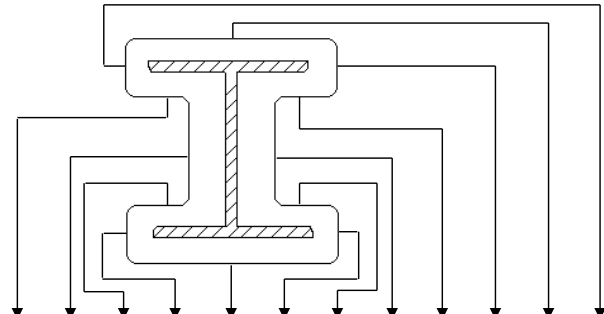
Comments: 1/2 flange thickness design

Sampled by: K. Gimpel
Reviewed by: RED



SFRM REPORT ON BEAM OR COLUMN
ASTM E605/E736

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Material: Monokote MK-6/HY
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 1/9/17



Floor No.	Column/Beam No.	Type	Test Date	Spec.													Averages		
					1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total
2nd Floor Framing	Column B/5	W10x54	1/16/17	2.000	2.313	3.000	2.500	2.000	2.000	2.000	2.500	3.250	2.125	2.000	2.125	2.000	2.160	2.000	2.107
2nd Floor Framing	Column B/3	W10x39	1/16/17	2.188	1.875	1.188	1.375	1.000	1.563	0.563	1.688	1.500	1.250	1.313	0.875	2.000	1.496	1.320	1.438
2nd Floor Framing	Column C/2	W10x49	1/16/17	2.063	2.250	2.500	2.750	1.688	2.625	1.500	2.500	3.500	2.375	1.438	2.375	1.813	2.297	1.633	2.076
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total
Floor No.	Column/Beam No.	Type	Test Date	Spec.	1	2	3	4	5	6	7	8	9	10*	11*	12*	Faces	Flange Tips	Total

* Not required for beams

ASTM E-605 8.1.2.1 For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. (Averages reflect ASTM guidelines). No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

ASTM E-605 8.1.2.1 Note 1- Specific fire resistance rating criteria for beams, trusses, and columns may allow for a reduced thickness on flange tips. These thicknesses are to be averaged apart from other sections of the structural member.

DENSITY

Test Date	Framing Level	Member Type	Member Location	Thickness (in)	Area (in ²)	Density (pcf)	Specification (pcf)

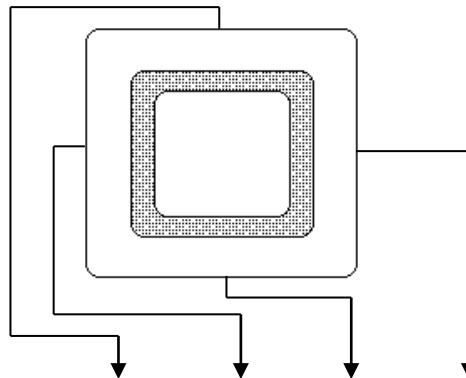
ADHESION/COHESION

Test Date	Framing Level	Member Type	Member Location	Failure Type	Force (lbs)	Bond (psf)	Specification (psf)

Comments: 1/2 flange thickness design. Column B/2 similar to B/3, both need additional thickness to satisfy requirements. Column at A/1 also needs additional thickness on "outside face".

Sampled by: K. Gimpel
Reviewed by: RED

Project Name: Luminato Condominiums
Project Number: 16-0910
Client: Luminato Condominiums, LLC
SFRM Supplier: Grace Construction Products
SFRM Installer: New England Fireproofing, Inc.
Installation Date: Week of 1/9/17



Location	Member Type	Required Thickness	1	2	3	4	Average Thickness
S102, Brace A	HSS 6x6x1/4	2.688	2.813	3.500	2.500	3.250	2.813
			2.875	3.063	2.563	3.000	
S102, Brace C	HSS 6x6x1/4	2.688	3.000	2.688	1.875	3.000	2.610
			3.063	2.750	1.813	4.000	

ASTM E-605 8.1.2.1

For the purpose of averaging measurements, any measurement 6 mm (1/4 in.) or more, over the required design thickness, shall be recorded as the design thickness plus 6 mm. No individual measured thickness shall be more than 6 mm less, or more than 25 % less, than the required design thickness.

Comments: "Outside" face of both HSS sections at Brace C need additional thickness to satisfy project requirements.

Sampled by: K. Gimpel
Reviewed by: RED