

SHOP DRAWING REVIEW FORM AND TRANSMITTAL

DATE: November 5, 2021

TO: Carl Hendrickson
Project Manager
Veolia Water
825 West Water Street
Taunton, MA 02780

FROM: Michael Andrus, P.E.
Project Manager
BETA Group, Inc.
701 George Washington Hwy
Lincoln, Rhode Island 02865

RE: City of Taunton, MA
WWTF Phase 1 Improvements
Contract S-2021-1

Shop Drawing No. 09260-01

Acoustic Ceiling Tile

BETA COMMENTS:

<u>Item</u>	<u>Action Code</u>	<u>Description/Comments</u>
1	2	Acoustic Ceiling Tile System 1. See attached comments from GHD

Action Codes

- 1 - No Exception Taken
- 2 - Make Corrections Noted
- 3 - Amend and Resubmit
- 4 - Rejected, See Remarks

- a. Installation shall proceed only when Action Code is '1' or '2'.
- b. Submittals action coded '3' shall be resubmitted within time limit set in Contract.
- c. Review does not relieve Contractor from responsibility of compliance with the Contract Documents.



Hart Engineering Corporation

SUBMITTAL:
09260-01

PROJECT: 9900. - Veolia/Taunton WWTF Phase 1 Improvements

DATE: 10/12/2021

SUBMITTAL: 09260-01 - Acoustic Ceiling Tile System

REVISION: 0

STATUS: Eng

SPEC #: 09260

TO:
Michael Andrus
 Beta Group Inc.
 6 Blackstone Place
 Lincoln, RI 02865
 MAndrus@BETA-Inc.com

FROM:
Ryan Murphy
 Hart Engineering Corporation
 800 Scenic View Drive
 Cumberland, RI 02864
 rmurphy@hartcompanies.com

Item	Revision	Description	Status	Date Sent	Date Returned
09260-01	0	Acoustic Ceiling Tile System	Eng	10/12/2021	
Notes:					

Additional Notes:

Status Codes

- 1-APP – No Exceptions Taken
- 2-ANR – Make Corrections Noted
- 3-R&R – Revise and Resubmit
- 4-REJ – Rejected
- 5-IPO – For Information Purposes Only
- 6-NRR – Not Required for Review
- ENG – Submitted to Engineer

Sincerely,
Hart Engineering Corporation

SHOP DRAWING REVIEW

1 – Approved 2 – Approved as Noted
 3 – Revise and Resubmit 4 - Rejected
 5 – Record File Only – No Action Taken

(Above Check Designates Action Code – See Review Comments)

IMPORTANT NOTE FOR CONTRACTOR

Review is only for general compliance with the design concept and information provided in Contract Documents. Corrections and comments made on the Shop Drawings during review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Review and/or approval of a specific item shall not include review or approval of an assembly of which the item is a component. No approval or correction of a Shop Drawing shall be construed as an order for extra work. The Contractor is responsible for: all quantities and dimensions to be confirmed and correlated; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all trades and subcontractors; and performing all Work in a safe and satisfactory manner.

BETA GROUP, INC. Checked By: AR (GHD)

By: MLA Date: 11/5/21

DATE: 10/12/2021



SUBMITTAL REVIEW COMMENT SHEET

PROJECT TITLE:	Taunton WWTG Phase 1 Improvements		
OWNER:	Town of Taunton, MA		
CONTRACT NO.:		PROJECT NO.:	11186884

SUBMITTAL NO. AND TITLE:	09260-01-Acoustic Ceiling Tile System	<input type="checkbox"/> ACCEPTED <input type="checkbox"/> ACCEPTED AS CORRECTED (NO RESUBMITTAL REQUIRED) <input type="checkbox"/> ACCEPTED AS CORRECTED (RESUBMITTAL REQUIRED) <input checked="" type="checkbox"/> ACCEPTED AS CORRECTED (PROVIDE REQUESTED INFORMATION ONLY)
SPECIFICATION SECTION NO. AND TITLE:	11186884-SPC1	
<input checked="" type="checkbox"/> SHOP DRAWING <input type="checkbox"/> O&M MANUAL <input type="checkbox"/> PRODUCT SAMPLE <input type="checkbox"/> OTHER:	Reviewed only for conformance with the design concept of the project and with information given in the Contract Documents. The Contractor is responsible for: 1) verifying that dimensions are confirmed and correlated at the job site; 2) obtaining information that pertains to the fabrication processes or to techniques of construction; and 3) coordinating the work of all subcontractors.	<input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> NOT APPROVED <input type="checkbox"/> NOT REVIEWED <input type="checkbox"/> FOR INFORMATION PURPOSES ONLY

By: KNH

Date: 11/3/2021

Comments:

1. Confirm use of appropriate cross-tee size for 24"x24" acoustical ceiling tiles.

FINE FISSURED™ FINE FISSURED™ High NRC

Tegular
medium texture

GREENGUARD
Gold Certified
(details below)

UP TO **73%** RECYCLED CONTENT

Calculate LEED contribution at
armstrongceilings.com/greengenie



VISUAL SELECTION

PERFORMANCE SELECTION

Dots represent high level of performance.

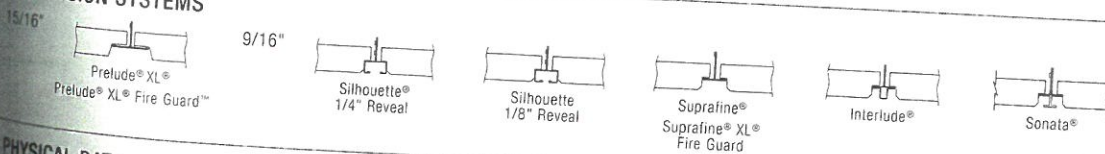
\$\$\$\$

Edge Profile	Susp. Dwg. Pgs. 474-478 armstrongceilings.com/catdwgs	Item No. ◆	Dimensions (Inches)	UL Classified Acoustics	Total Acoustics ¹	Articulation Class	Fire Performance	Light Reflect	Mold & Mildew Protection	Sag Resist	Certified Low VOC Emissions	Durability	Recycled Content	Recycle Program	30-Yr Warranty
FINE FISSURED™ High NRC															
15/16" Angled Tegular	13	1756	24 x 24 x 7/8"	0.75	35	BETTER	170 Class A	0.86	•	•	•	Std	•	•	•
	13	1757	24 x 48 x 7/8"	0.75	35	BETTER	170 Class A	0.86	•	Std	•	Std	•	•	1-Yr
9/16" Beveled Tegular	29, 44, 48, 52, 56	1758	24 x 24 x 7/8"	0.75	35	BETTER	170 Class A	0.86	•	•	•	Std	•	•	•
	29, 44, 48, 52, 56	1759	24 x 48 x 7/8"	0.75	35	BETTER	170 Class A	0.86	•	Std	•	Std	•	•	1-Yr
FINE FISSURED™															
15/16" Angled Tegular	12	1732	24 x 24 x 5/8"	0.55	35	-	N/A Class A	0.85	•	•	•	Std	•	•	•
	12	1833	24 x 24 x 5/8"	0.55	35	-	N/A Fire Guard™	0.85	•	•	•	Std	Std	•	•
	12	1733	24 x 48 x 5/8"	0.55	35	-	N/A Class A	0.85	•	•	•	Std	Std	•	•

¹ Total Acoustics® ceiling panels have an ideal combination of noise reduction and sound-blocking performance in one product. GOOD (NRC 0.60-0.65; CAC 35+) BETTER (NRC 0.70-0.75; CAC 35+) BEST (NRC 0.80+; CAC 35+)
◆ Add 2-letter color suffix to item number when specifying or ordering (e.g., 1732 C B)

MORE ITEMS ▶

SUSPENSION SYSTEMS



PHYSICAL DATA

Material
Non-formed mineral fiber

Surface Finish
Factory-applied latex paint

Fire Performance
ASTM E84 and CAN/ULC S102 surface burning characteristics. Flame Spread Index 25 or less. Smoke Developed Index 50 or less. (UL labeled).
Fire Guard™: A fire-resistive ceiling when used in applicable UL assemblies. (Class A).

ASTM E1264 Classification
Type II, Form 2, Pattern C E

Humidity/Sag Resistance
Greenguard® Plus ceiling panels are recommended for areas subject to high humidity, up to, but not including, standing water and outdoor applications.

Mold/Mildew Protection
Ceiling panels with BioBlock® performance resist the growth of mold and mildew.

VOC Emissions
GREENGUARD Gold Certified
Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010. This standard is the guideline for low emissions in LEED, CalGreen Title 24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBI Green Building Assessment Protocol (excludes item 1732 in colors).

PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818



Acoustical Performance
CAC testing conducted using Prelude® XL® suspension system for 15/16" edge detail and Silhouette suspension system for 9/16" edge detail.

High Recycled Content
Contains greater than 50% total recycled content. Total recycled content based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.

Insulation Value
R Factor - 1.5 (BTU units)
R Factor - 0.26 (Watts units)

30-Year Performance Guarantee & Warranty
When installed with Armstrong® Suspension System. Details at armstrongceilings.com

Weight; Square Feet/Carton
1732 - 0.70 lbs/SF; 64 SF/ctn
1733 - 0.70 lbs/SF; 80 SF/ctn
1833 - 1.05 lbs/SF; 48 SF/ctn
1756, 1758 - 1.08 lbs/SF; 40 SF/ctn
1757, 1759 - 1.08 lbs/SF; 48 SF/ctn

Minimum Order Quantity
1 carton

Metric Items Available
1732M, 1733M, 1756M, 1757M, 1758M, 1759M - Metric items subject to extended lead times and minimum quantities.

PRELUDE® XL® PRELUDE XL High Recycled Content Exposed Tee System



DeclareSM
Living Building
Challenge Compliant

SUSTAINSM
High Performance
Sustainable
Ceiling Systems

LEED UP TO **63%** RECYCLED CONTENT

Calculate LEED contribution at armstrongceilings.com/greengenie

- energy management
- construction waste mgmt
- regional materials
- design for flexibility
- EPD
- recyclable/extended producer resp.
- bio-based materials
- recycled content
- sourcing of raw materials
- material ingredient reporting
- low emitting materials
- lighting quality
- acoustics

VISUAL SELECTION

Face Profile	Item No. ♦	Description	Rout Spacing	Dimensions (Inches)	Hanger Spacing* Lbs./LTF	PERFORMANCE		PACKAGING	
						Fire Guard™	Seismic Category	Pcs./ Ctn.	LFT/ Ctn.
Prelude® XL® (Red Numbers are Fire Guard™ Items)									
15/16"	XL7357 ♦	5' Cross Tee	6", 12", 24", 30", 36", 48", 54"	60 x 15/16 x 1-11/16"	4 Ft. 5 Ft.	•	•	60	300
15/16"	XL7358 ♦	5' Cross Tee	6", 20", 30", 40", 50"	60 x 15/16 x 1-11/16"	-	•	•	60	300
15/16"	XL7341 ♦ XL7341HRC XL8341	4' Cross Tee	12" O.C.	48 x 15/16 x 1-11/16"	16.89	•	•	60	240
15/16"	XL7340 ♦ XL8340 †	4' Cross Tee	12" O.C.	48 x 15/16 x 1-11/16"	12.25	•	•	60	240
15/16"	XL7342 † † †	4' Cross Tee	12" O.C.	48 x 15/16 x 1-1/2"	7.8	•	•	60	240
15/16"	XL7348 ♦	4' Cross Tee	12" O.C.	48 x 15/16 x 1-3/8"	6.78	•	•	60	240
15/16"	XL7330 †	3' Cross Tee	-	36 x 15/16 x 1-11/16"	20.3 at 3'	•	•	60	240
15/16"	XL7378 †	30" Cross Tee	-	30 x 15/16 x 1-3/8"	16.54 at 2.5'	•	•	60	180
15/16"	XL7328 † † † XL8323 † † †	2' Cross Tee	-	24 x 15/16 x 1-3/8"	36.0 at 2'	•	•	60	150
15/16"	XL8320HRC XL8320 † †	2' Cross Tee	-	24 x 15/16 x 1-11/16"	61.33 at 2'	•	•	60	120
15/16"	XL7368 ♦	20" Cross Tee	-	20 x 15/16 x 1-3/8"	36.0 at 1.67'	•	•	60	120
15/16"	XL7398 ♦	18" Cross Tee	-	18 x 15/16 x 1-3/8"	-	•	•	60	100
15/16"	XL7318 ♦	1' Cross Tee	-	12 x 15/16 x 1-3/8"	36.0 at 1'	•	•	120	120
15/16"	XL7304 ♦	4" Cross Tee	-	4 x 15/16 x 1-3/8"	-	•	•	60	20

Size Capabilities

Main Beams Length	Cross Tees Length
24" - 144"	3" - 144"

1 CTN MIN
Made-to-Order Sizes or Colors (2 Wks)*

* NOTE: Up to 6 Weeks for Color & Size Combinations

Made-to-Order main beams and cross tees can be ordered with special sizes, rout spacing, and colors for your project needs in one carton minimums.

Item No. ♦	Description	Length	(A) Flange	(B) Height	(C) Reveal	(D) Reveal	Pcs./ Ctn.	LFT/ Ctn.
7800 † † † 7800HRC	12' Hemmed Angle Molding	144"	7/8"	7/8"	-	-	30	360
7808 ♦ † †	10' Hemmed Angle Molding	120"	2"	2"	-	-	10	100
780812 ♦	12' Hemmed Angle Molding	144"	2"	2"	-	-	10	120
7807	10' Hemmed Angle Molding	120"	2"	1"	-	-	10	100
7875 ♦	10' Shadow Molding	120"	3/4"	15/16"	1/2"	-	30	300
7877 ♦ ***	10' Shadow Molding	120"	15/16"	15/16"	1/4"	-	30	300
7876 ♦ ***	10' Shadow Molding	120"	15/16"	15/16"	3/8"	-	30	300
7897 ♦ ***	10' Shadow Molding	120"	15/16"	15/16"	1/2"	-	30	300
7888	10' Shadow Molding	120"	9/16"	15/16"	3/8"	1/4"	30	300
7850 ♦	10' Hemmed Angle Molding	120"	1-1/8"	7/8"	-	-	30	300
7851 ♦	12' Hemmed Angle Molding	144"	1-1/8"	7/8"	-	-	30	360

† Simple Span
 †† Hanger Wire Support Mid-Span
 ††† Suitable for IBC Category D,E,F installations using Armstrong® Seismic Rx® suspension system and BERC2 Clip
 ♦ Items available in Standard, Premium, and Blizzard White powder-coated finish
 ♦♦ Items available with TrioGuard™ coating in White (WH3G)
 ♦♦♦ Items available in Blizzard White powder-coated finish
 ♦ When specifying or ordering items with a color or finish, add the two-letter suffix to the end of the item number (e.g., 7800HA - Haze)

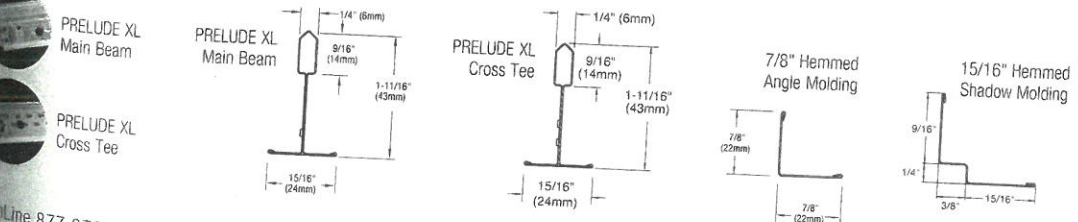
ASTM Class
 HD - Heavy-duty
 ID - Intermediate-duty
 LD - Light-duty

ACCESSORIES

For accessories see pages 472-473

DETAILS

For more information, see submittal CS-3344.



Line 877 276-7876

ceiling.com/suspensionsystems

LEED® is a registered trademark of the U.S. Green Building Council
 Declare™ is a service mark of The International Living Future Institute

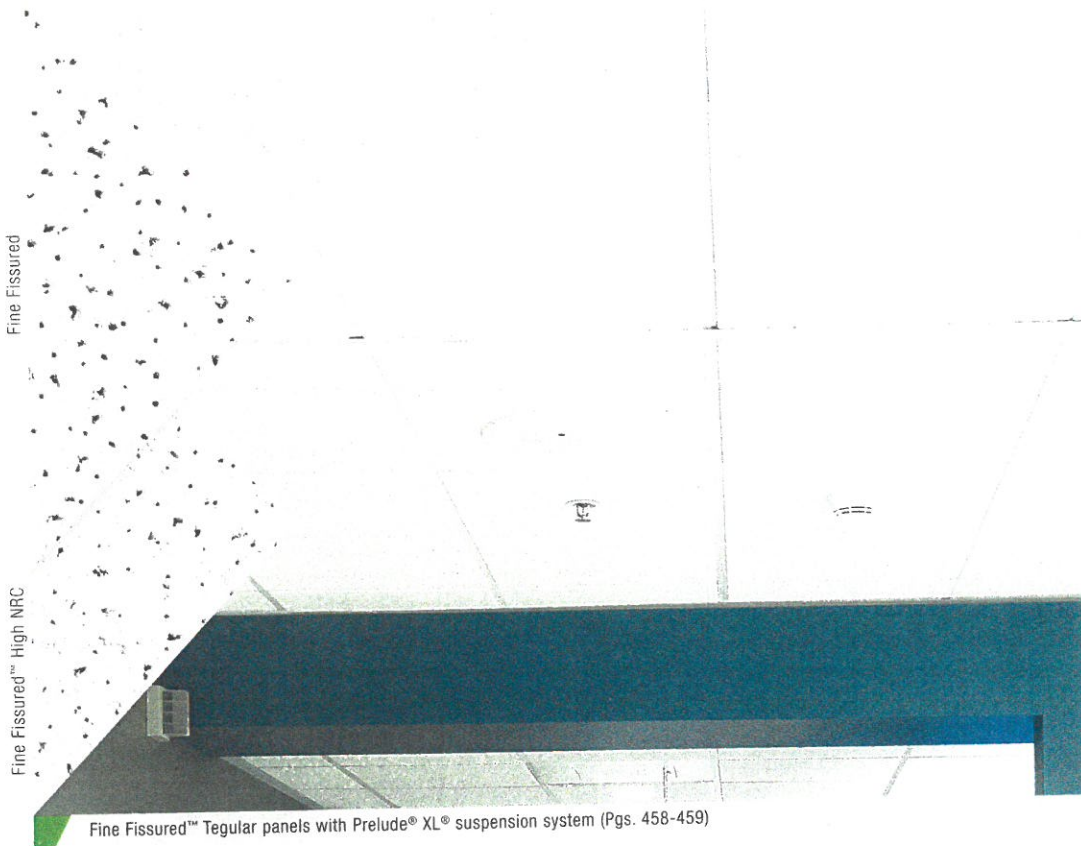


SUSPENSION SYSTEMS



FINE FISSURED™
FINE FISSURED™ High NRC

Tegular
medium texture



Fine Fissured

Fine Fissured™ High NRC

Fine Fissured™ Tegular panels with Prelude® XL® suspension system (Pgs. 458-459)



See more photos at:
armstrongceilings.com/photogallery
SEARCH: fine fissured

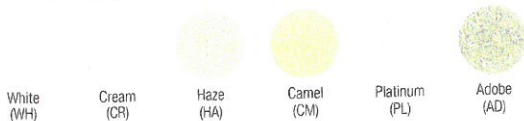
This economical, non-directional panel available in standard and high acoustical absorption options.

KEY SELECTION ATTRIBUTES

- Get total noise control and floor plan versatility with Total Acoustics® ceiling panels: NRC + CAC = Total Acoustics performance
- Options provide excellent combination of acoustical performance NRC (up to 0.75), CAC (up to 35), and Articulation Class (170)
- Fine Fissured™ School Zone® items help comply with ANSI S12.60 Classroom Guidelines
- Non-directional visual reduces scrap and installation time
- 30-Year Limited System Warranty against visible sag, mold, and mildew
- 10-Year replacement panel available for items 1732,1734

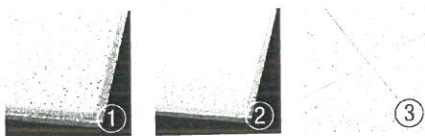


COLORS Due to printing limitations, shade may vary from actual product.



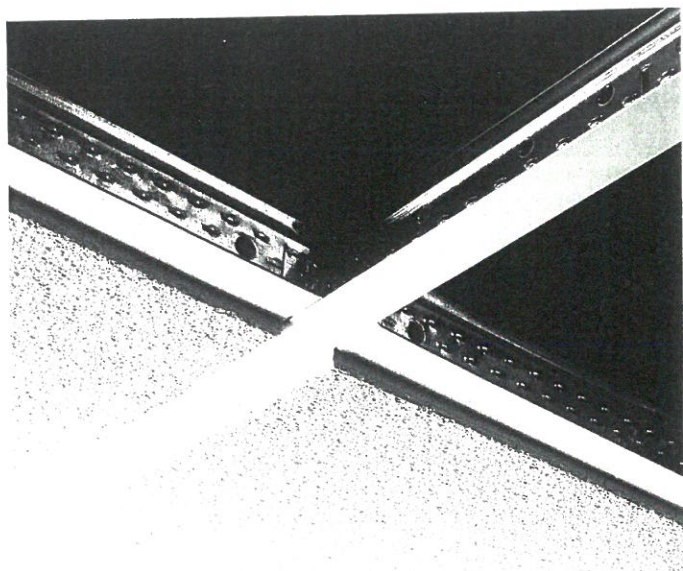
Item 1732 is available in colors.
All other items are available in White only.
Colored ceilings are dye-lotted and should be segregated by dye lot. Do not mix.

DETAILS (Other Suspension Systems compatible. Refer to listing on page 317.)



1. Fine Fissured™ Beveled Tegular
2. Fine Fissured™ Angled Tegular
3. Fine Fissured™ Tegular with Suprafine® 9/16" suspension system

PRELUDE® XL® PRELUDE XL High Recycled Content Exposed Tee System



This hot-dipped galvanized steel 15/16" suspension system offers high recycled content for improved LEED® credits.

KEY SELECTION ATTRIBUTES

- Seismic Rx® Suspension System saves time and money; Armstrong Ceilings offers an ICC-ES approach to installations (ESR-1308)
- PreLUDE® XL® is part of the Sustain™ portfolio and meets the most stringent sustainability compliance standards today – White and 13 Sustain™ colors only (colors found on Pg. 449)
- PeakForm® profile increases strength and stability for improved performance during installation
- SuperLock™ main beam clip is engineered for a strong, secure connection and fast, accurate alignment confirmed with an audible click; easy to remove/relocate
- Hot-dipped galvanized coating inhibits rust better than electrogalvanized or painted systems
- 10-Year Limited System Warranty; 30-Year Limited Ceiling Systems Warranty when used with HumiGuard® Plus products
- Made-to-Order main beams and cross tees can be ordered for your project needs in one carton minimum
- Available with TrioGuard® coating that resists dirt, bacteria, mold, mildew, and color fading
- XL® staked-on end detail provides secure locked connection
- Fire Guard™ options offer UL design fire-rated performance
- Blizzard White powder-coated finish
- Linear lighting integration is easy with made-to-order main-beam-to-cross-tee adapters, rout spacing, miter spacing, and short cross tees (3" to 6" lengths).
- 10-Year replacement items available



PreLUDE® XL® suspension system

VISUAL SELECTION

Face Profile	Item No. ♦	Description	Rout Spacing	Dimensions (Inches)	Hanger Spacing* Lbs./LFT	4 Ft.	5 Ft.
PreLUDE® XL® (Red Numbers are Fire Guard™ Items)							
15/16"	7301 † † †	12' HD Main Beam	6" O.C.	144 x 15/16 x 1-11/16"	16.73	8.73	
	7301HRC						
	8301						
15/16"	7300 ❖ † †	12' ID Main Beam	6" O.C.	144 x 15/16 x 1-11/16"	13.5	6.35	
	8300 - †						
15/16"	7305 ❖	140" HD Main Beam	10" O.C.	140 x 15/16 x 1-11/16"	10.73	8.73	
15/16"	7306 ❖	132" HD Main Beam	10", 30", 50", 56", 76", 96", 116", 122"	132 x 15/16 x 1-11/16"	16.73	8.73	
15/16"	7307 ❖	126" HD Main Beam	10", 30", 50", 70", 90", 110", 116"	126 x 15/16 x 1-11/16"	-	-	
15/16"	7302 ❖	10' ID Main Beam	6" O.C.	120 x 15/16 x 1-11/16"	13.5	6.35	
15/16"	XL7380 ❖	8' Cross Tee	12" O.C.	96 x 15/16 x 1-11/16"	12.12**	-	
15/16"	XL7390 ❖	6' Cross Tee	12" O.C.	72 x 15/16 x 1-11/16"	12.24*	-	

PERFORMANCE

Fire Guard™	Seismic Category
Dots represent high level of performance.	

PACKAGING

Pcs./ Ctn.	LFT/ Ctn.
20	240
20	240
20	240
20	240
20	240
20	233
20	220
20	210
20	200
20	160
20	120

NOTE: Additional PreLUDE XL items for TechZone® Ceiling Systems are listed in the TechZone Technical Guide (BPCS-4486). Available online at armstrongceilings.com/techzone

ASTM Class
HD - Heavy-duty
ID - Intermediate-duty
LD - Light-duty

COLORS

Standard

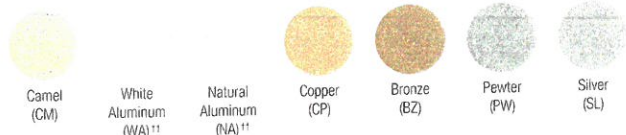


Powder-Coated Finish



Available in any color!

Premium



♦ Capping only
NOTE: Items 8300, XL8340, XL8323 available in Black (BL) or White (WH) only