

March 26, 2020

SOLICITATION ADDENDUM NO. 2
ITB 19-00-0042
Westview High School CTE Shop Renovation

THE FOLLOWING CHANGES/ADDITIONS TO THE ABOVE CITED SOLICITATION ARE ANNOUNCED:

This Addendum modifies the Invitation to Bid (ITB) document(s) only to the extent indicated herein. All other areas not changed or otherwise modified by this Addendum shall remain in full force and effect. This Addendum is hereby made an integral part of the ITB document. Bidder must be responsive to any requirements of this Addendum as if the requirements were set forth in the ITB. Failure to do so may result in Bid rejection. See the ITB regarding requests for clarification or change and protests of this Addendum, and the deadlines for the foregoing.

This addendum is to be acknowledged in the space provided on the Bidder Certification form supplied in the solicitation document. Failure to acknowledge receipt of this addendum may be cause to reject your offer.

The closing date **REMAINS UNCHANGED: April 2, 2020 at 2:00 PM Pacific Time**

CHANGES:

CHANGES TO THE SOLICITATION:

Due to the nature of COVID19, we are requiring bidders to submit their bid via email to:
contracts@beaverton.k12.or.us prior to 2:00 PM on April 2, 2020

Please join us via conference call to hear the opening of these bids:

+1(503)356.4400
Participant code: 41605148

CLARIFICATIONS:

Clarifications and Questions from March 11, 2020 Pre-Bid Conference

Question: The duct is going above or below ceiling?

Answer: The duct is going below the ceiling.

Question: Please consider the attached substitution requests.

Answer: For the purposes of this Solicitation, the substitution requests are denied. Please see the attached request forms for more information.

-END of Addendum

Peter Madaus
Contract Specialist

SUBSTITUTION REQUEST

TO: Otak Architects, Inc., 808 SW 3rd Avenue, Suite 800, Portland, OR 97204 Attn: amy.scheckla-cox@otak.com

PROJECT: Westview High School CTE Shop Renovation

SPECIFIED ITEM:

Section 23 35 13 **Page** 2 **Paragraph** 2.3 A.

Description Dust Collectors

PROPOSED SUBSTITUTION: Nederman NFPZ Dust Collector

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identification of applicable data portions.

Attached data also includes description of changes to Contract Documents and proposed substitution requires for proper installation.

Undersigned certifies following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing, and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts available locally or readily obtainable for proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by:

Kevin Marple

Name (Printed or typed)

General Contractor (if after award of Contract)

Signature

Firm Name Benz Air Engineering Co., Inc.

Address 7959 SW Cirrus Drive

City, State, Zip Beaverton, OR 97008

Date 3-6-2020

Tel: 503-596-2561 Fax: 503-596-2743

For use by A/E

- ☐ Approved ☐ Approved as noted
☒ Not Approved ☐ Received too late

By John Kotas, Interface Engineering

Date _____
Remarks Proposed unit height is significantly larger than basis of design unit.

**The Construction Specifications Institute
Northwest Region**

Owner (if after award of Contract)

Date _____



Advancement
of Construction
Technology

[Click to go to the page](#)

Nederman



NFPZ
Negative Pressure Bag Filter

The NFPZ (1,000 – 12,000 CFM)

Suitable for collection of many different types of dust including wood, paper, plastics and other dry dusts.

Features

- *Clamp on barrels standard*
- *Shaker cleaning*
- *Small footprint*
- *Fan on clean side*
- *Optional fan silencer*
- *Optional plug-n-play*
- *Quiet operation*
- *NFPA Compliant*



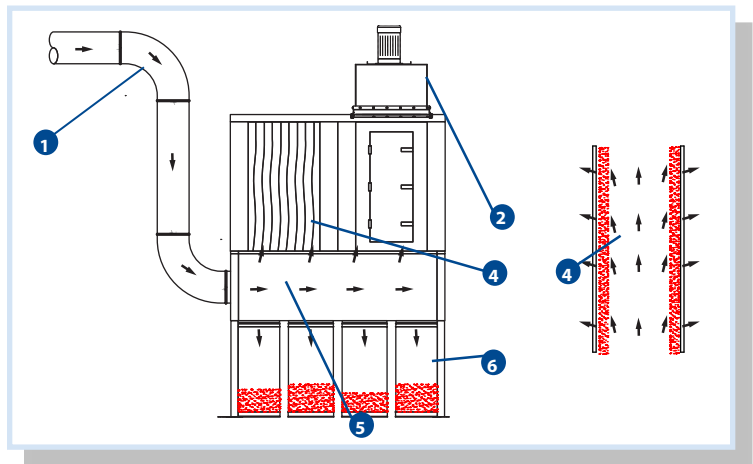
Applications:

High speed routing, Sawing, Cutting, Sanding, Dump stations, Shifting, Light dust loads.

How it Works

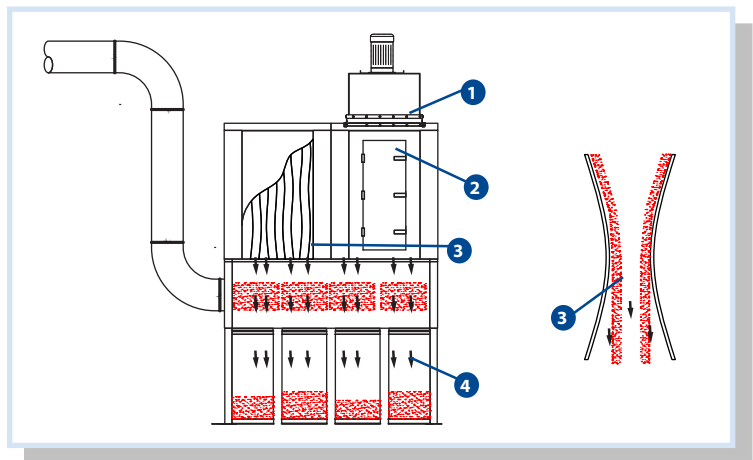
...during normal operation

1. During normal operation, the dust laden air from the plant travels down the supply duct **1**
2. The dust then enters the hopper section **5** of the filter
3. As air slows down within the hopper, the heavier dust particles fall down into the inside of the filter bags **6**
4. The remaining dust then travels up into the inside of the filter bags **4**
5. The air, which originated from the plant, is now clean and passes through the filter bag into the fan. **2** May exhaust to outside or be ducted back to building via proper designed return air system

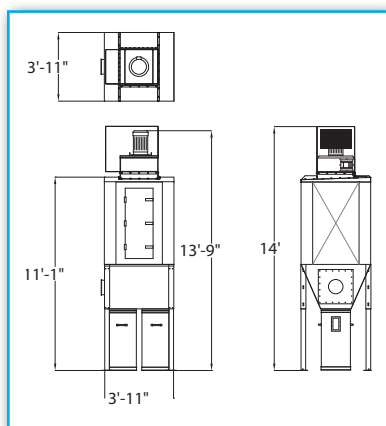


...while cleaning

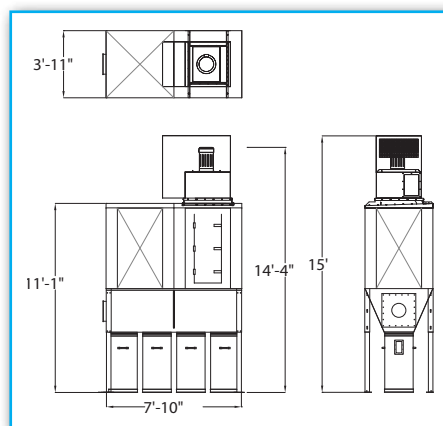
1. The NFPZ filter must also clean "off-line", when the fan **1** has stopped rotating
2. A shaker mechanism **2** is automatically started when the fan is stopped and operates for a set period
3. The dust which remains on the inside of the filter bag, **3** after the 'shake' is loosened from the filter fabric
4. The dust which is removed during the cleaning cycle falls into the collection bags/barrels **4**



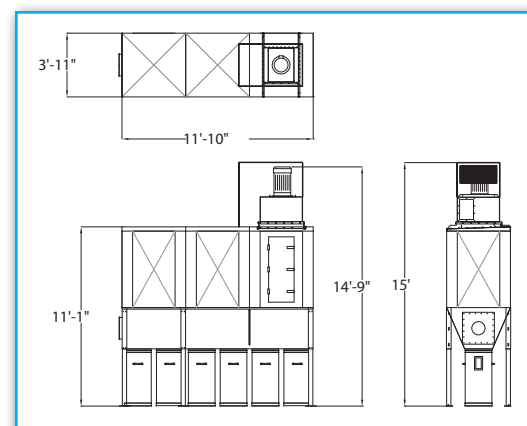
Dimensions and performance



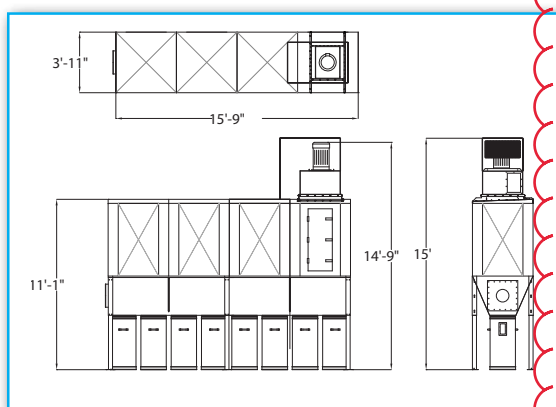
NFPZ3000-1LE



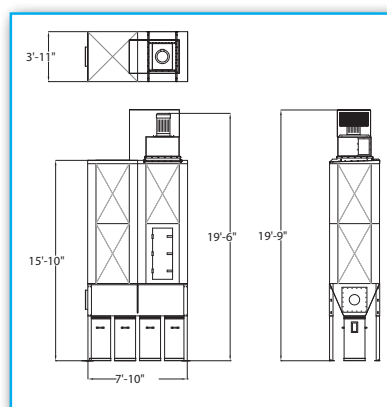
NFPZ3000-2LE



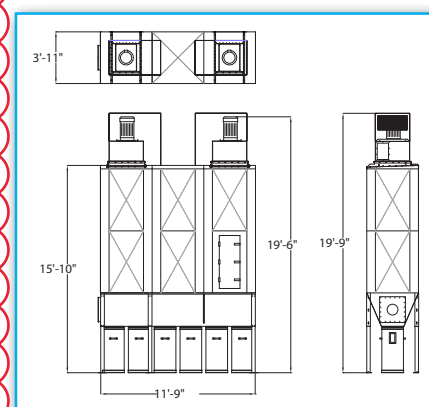
NFPZ3000-3LE



NFPZ3000-4LE



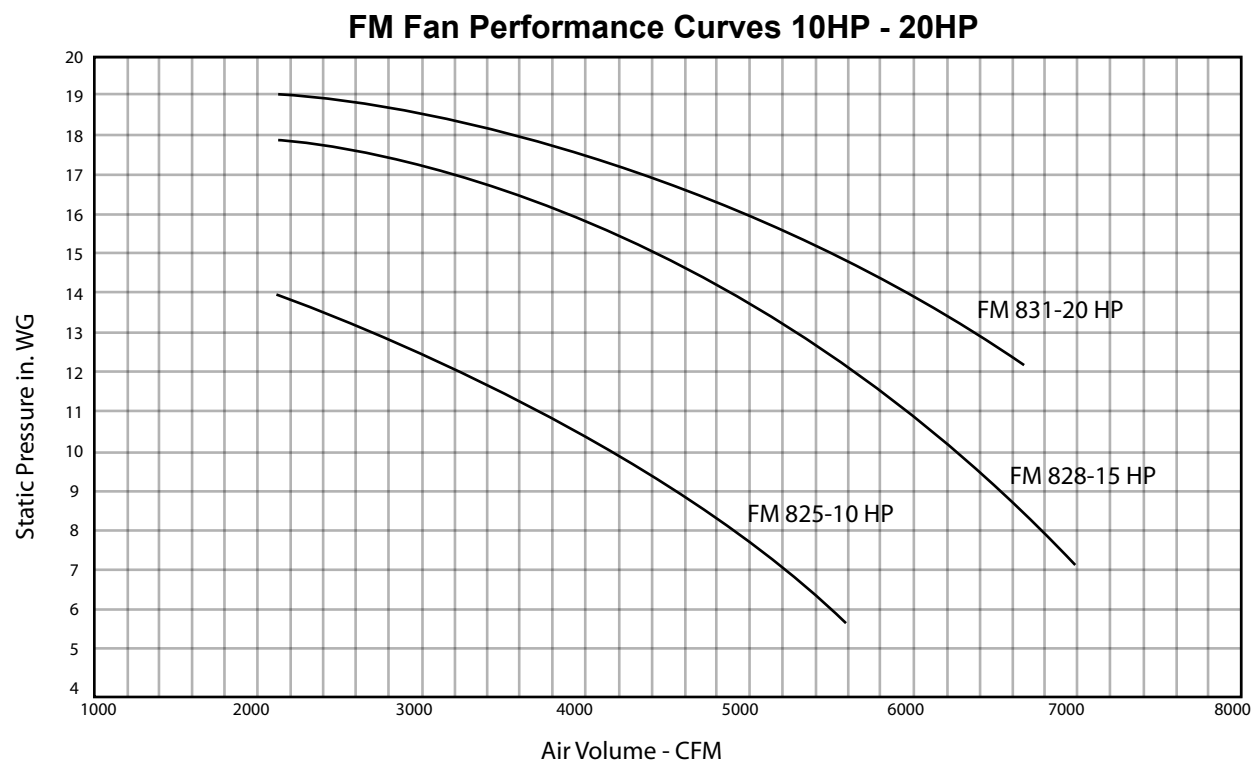
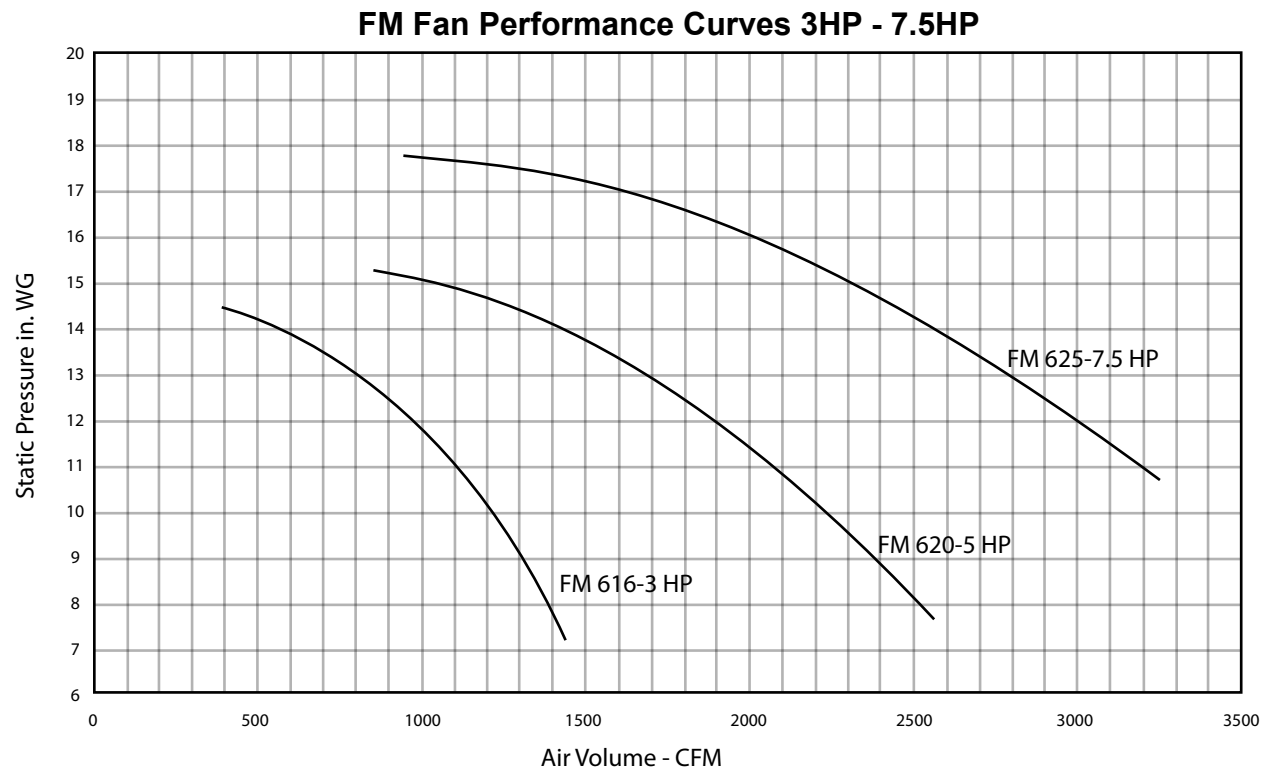
NFPZ3000-2HE



NFPZ3000-3HE

MODEL NUMBER	NO. OF BAGS	FILTER MEDIA (FT ²)	AIR VOLUME (CFM)	INLET DIA.	STANDARD FAN		ALTERNATE FAN	
					FM FAN	FAN SP	FM FAN	FAN SP
NFPZ3000-1LE	25	215	1900	10"	620-5 HP	14"	625-7.5 HP	17"
NFPZ3000-2LE	50	430	3800	14"	825-10 HP	12"	828-15 HP	17"
NFPZ3000-3LE	75	645	5700	16"	828-15 HP	15"	831-20 HP	17"
NFPZ3000-4LE	100	860	7600	18"	831-20 HP	15"	860-25 HP	17"
NFPZ3000-2HE	50	900	7000	18"	831-20 HP	15"	860-25 HP	17"
NFPZ3000-3HE	75	1350	10500	22"	2 x 828-15 HP	10"	2 x 831-20 HP	18"

FMC Fan Curves



Superbag - The heart of the system

A filter is only as good as the filter bags it uses. This is the component that provides the filtering while allowing clean air to pass through with the least possible resistance and, therefore, the lowest possible consumption of energy-even after several thousand hours of operation.



SUPERBAG is fitted as the standard in all NFP filters.

Efficiency and low energy consumption

Superbag is polyester filter bag. A weaving technique in tubular format give the filter bag a surface which can cope with varying dust loads and with virtually any type of dust. Better filtering efficiency is achieved with this unique filter media which provides low pressure drop, and low energy consumption.

Strength and durability

The special shape of the SUPERBAG helps to ensure that the high efficiency and effectiveness of the NFP filter system is maintained even after long periods of operation. The durability is the result of the construction, strong polyester fiber and seamless body. These features also help make cleaning of the filter bag very easy.

Antistatic

SUPERBAG's interwoven carbon fiber wire provides higher anti-static properties - both on the surface and inside - than traditional filter bags. This reduces the risk of fire and explosion as fine particles are removed.

Superbag

Superbag Specifications

QUALITY	Circular knitted with two integrated layers filter	
MATERIAL	100% polyester	
WEIGHT	16	Ounces/sqft
MAX. OPERATING TEMPERATURE	289	°F
INTERMITTENT PEAK TEMPERATURE	320	°F
MELTING POINT	482-500	°F
FILTER EFFICIENCY	U or G optional	99.9%
ELECTROSTATIC BEHAVIOR	Surface resistance 2.6×10^7 Ohm Charging towards PA 0.7 kV	DIN 54 345 TEIL 1 TEFO Method 40-77
APPLICATIONS	Filtration of: Shavings, saw dust, sanding dust, lacquering dust from woodworking industry as well as other fibrous materials such as mineral wool, paper strips and dust.	

Options



Bringing superior conditions to the workplace and the environment

For more than 60 years Nederman has developed, manufactured and marketed products and system solutions to reduce the strain on the environment and improve working conditions in numerous industries.

Our products and systems have been ground-breaking in industries such as Machining, Metal Fabrication, Automotive, Composite Manufacturing, Food, Paper, Chemical, Pharmaceutical and many others.

Today companies all over the world are using equipment from Nederman.



Nederman LLC
102 Transit Ave
POBox 429
Thomasville NC, 27361
800-533-5286

Nederman

www.nederman.com

REGISTERED
ISO
9001:2008
14001:2004

Nederman Sales companies in: Australia, Austria, Belgium, Brazil, Canada, China, Czech Rep., Denmark, France, Germany, Hungary, India, Ireland, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Thailand, United Kingdom, USA
Nederman Agents in: Bulgaria, Cyprus, Egypt, Estonia, Finland, Greece, Holland, Hong Kong, Iceland, Iran, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Malaysia, New Zealand, Philippines, Saudi Arabia, Serbia, Singapore, Slovenia, South Africa, Switzerland, Taiwan, R.O.C, Thailand, Turkey, United Arab Emirates

NFPZ.0812.0

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Options



 <small>IMPROVING YOUR WORKSPACE</small> 102 Transit Avenue Thomasville, NC 27361 800-533-5286 www.nederman.com	SPECIFICATIONS Revision: 20150518	DATE 3-6-2020
		PROJECT Westview HS CTE Renovation
	NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS	LOCATION Beaverton SD
		ARCH/ENG Otak, Inc. REP. NAME Benz Air Engineering Co., Inc.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions of the Contract of this Project Manual apply to this Section as though repeated herein.

1.2 SUMMARY

- A. Section Includes:

Consult with the factory for the proper NFPZ3000 Dust Collector selection as it relates to the intended use requirements. Selection of the proper filter is based upon related safety precautions or regulations, what is being extracted, capture velocity, airflow, corrosion resistance, noise level, temperature resistance, and space requirement and operator usability.

1. NFPZ3000-2HE ATEX Compliant ST1
2. Related accessories
3. Compliances

1.3 SUBMITTALS

- A. Product Data: Indicate manufacturer's model number, technical data including description of components, filtration efficiency, performance, noise level, accessories and installation instructions.
- B. Closeout Submittals: Operation and Maintenance Manual including spare parts list.

1.4 QUALITY ASSURANCE

- A. Engage an experienced installer to perform work of this Section who has completed installations similar in design and extent to that indicated for this Project, and who has a record of successful in-service performance.
- B. All components shall be fabricated in strict accord with standards set forth in the current edition of ISO 9001 and ISO 14001.

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		PROJECT
		LOCATION
	NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS	ARCH/ENG
		REP. NAME

- C. Engage a firm experienced in manufacturing Filtration Systems similar to that indicated for this Project and with a record of successful in-service performance.

Conduct conference at Project site. Review methods and procedures related to the NFPZ3000-2HE ATEX Compliant ST1 Dust Collector system installation.

1. Review access requirements for equipment delivery.
2. Review equipment storage and security requirements.
3. Inspect condition of preparatory work performed by other trades.
4. Review structural loading limitations.
5. Review that all components specified in this Section and related components specified in other Sections are accounted for.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Packing, Shipping, Handling and Unloading: Store in original protective crating and covering and in a dry location.

1.6 PROJECT/SITE CONDITIONS

- A. Existing Conditions: Verify dimensions installation areas by field measurements.

1.7 COORDINATION

- A. Coordinate layout and installation with other work, including light fixtures, fixed equipment and workstations, HVAC equipment, fire-suppression system components and equipment of movement such as overhead cranes.
- B. Coordinate location and requirements of service-utility connections.

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		PROJECT
		LOCATION
	NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS	ARCH/ENG
		REP. NAME

PART 2 - PRODUCT

2.1 MATERIALS

A. HOUSING

The NFPZ3000-2HE shall be a high efficiency filtration unit. The filter housing shall be constructed of galvanized 14 gauge thick steel panels. This construction shall be designed to withstand a maximum –16” w. g. working pressure.

B. CONTROL PANEL

The NFPZ Automatic Control Panel shall meet the following:

- UL Approval of Panel Assembly
- NEMA 12 Enclosure
- 208-230/460 or 575, 3 PH / 60 Hz Input Power Requirement. Specify voltage at time of order.
- Step down transformer to low voltage control circuitry
- Siemens LOGO! PLC Controller.
- Contactors for fractional(.15) HP shaker motor(s)
- Run and Stop illuminated Selector Switch
- Capability for Remote Run and Stop Switch
- Multiple fault inputs for interlocks – hopper door and explosion door
- Temperature rating of -4 to 140°F
- Maximum Installed Altitude of 10,000 ft ASL

C. EXPLOSION RELIEF SYSTEM


The NFPZ3000 shall have ATEX compliant explosion relief system to meet the following:

- ST1 dust
- 200 bar m/sec maximum
- 9 bar Pmax
- Third Party Certification and Validation of System Performance (Doors and Enclosure)

D. FILTERS

The NFPZ3000-2HE Dust Collector shall contain 50, filter bags in two modules. The filters shall be vertical 7.87 diameter filters 18 sq. ft. per bag.

- Material: 100% woven polyester with integrated carbon fiber for improved anti-static properties
- Construction: Vertically seamless
- Maximum Operating Temperature: 289 °F
- Material Basis Weight 16 Oz. per Sq. Ft.
- Electrostatic Behavior:
 - Surface Resistance: 2.6 x 10e7 Ohm – DIN 54 345 TEIL 1
 - Charging Toward PA: .7 kV TEFO Method 40-77
- BIA Filter Efficiency: G

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		LOCATION
	NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS	ARCH/ENG
		REP. NAME

The maximum standard static pressure drop across the unit shall be 3" w. g.
Filter exchange shall be performed on the clean side of the filters.

E. VIBRA \ SHAKER CLEANING SYSTEM

During stop downs, the filter bags shall be cleaned by mechanical agitation created from vibration \ shaker system. The integrated main control box shall have settings for offline cleaning and will be controlled based on accumulated time of uptime operation. The unit is fitted with two vibration mechanisms.

F. DUST CONTAINERS

The dust collector shall have four, 42 gallon Quickfit barrels. The collection barrels shall connect to the dust collector by means of QF clamp and will not require a tool for assembly or disassembly. Access to the barrels shall be from either side of the dust collector.

G. INTEGRAL FANS

The unit shall have one top mounted FM860 integral fan with 25 HP TEFC electrical motor. Construction: Galvanized panels

- Rated Performance (total): 7,000 SCFM @ 17" wg total static pressure,
- Nominal RPM: 3,500
- Rated Power: 460 V / 3 PH / 60 Hz
- Design Type: Backward curve blade and non-overloading

Fan Assemblies may be fitted with optional silencer to attenuate sound from fan discharge and breakout sound from housing.

2.2 MANUFACTURERS

ACCEPTABLE MANUFACTURERS

Products, which comply with this specification as judged by the Architect/Engineer may be provided by the following manufacturers. All products specified in this section shall be provided by a single manufacturer.

Nederman LLC
102 Transit Avenue
Thomasville, NC 27361
Ph 1-800-533-5286

Approved Equal.

 <small>IMPROVING YOUR WORKSPACE</small> 102 Transit Avenue Thomasville, NC 27361 800-533-5286 www.nederman.com	SPECIFICATIONS Revision: 20150518	DATE
		PROJECT
		LOCATION
	NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS	ARCH/ENG
		REP. NAME

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances, service-utility connections, and other conditions affecting installation and performance of equipment. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide surface/substrate preparation as required by the manufacturer's printed installation instructions. Do not proceed with installation until site is in proper condition to receive the NFPZ3000-2HE Dust Collector.

3.3 INSTALLATION

- A. Install equipment in accord with manufacturer's written instructions, original design and referenced standards.

3.4 ADJUSTING

- A. Adjust the NFPZ3000 Dust Collector if needed, for proper operation. Replace any parts that prevent the system from operating properly.

3.5 CLEANING

- A. Remove all debris caused by installation. Clean all exposed surfaces to as fabricated condition and appearance.

3.6 PROTECTION

- A. Provide protection of the completed installation until completion of the project. Repair any damage at no additional cost to Owner.

3.7 DEMONSTRATION / TRAINING

 <p>Nederman IMPROVING YOUR WORKSPACE</p> <p>102 Transit Avenue Thomasville, NC 27361 800-533-5286 www.nederman.com</p>	<p align="center">SPECIFICATIONS Revision: 20150518</p>	DATE
		PROJECT
		LOCATION
	<p align="center">NFPZ3000-2HE DUST COLLECTOR FOR EXPLOSIVE DUSTS</p>	ARCH/ENG
		REP. NAME

- A. Provide the end user a minimum of one hour of hands-on demonstration and operation of the NFPZ3000 Dust Collector and related equipment.

3.8 WARRANTY

- A. Provide a written warrantee for a period of one year from date of shipment for all components.

END OF SECTION



SUBSTITUTION REQUEST

We believe our acoustical ceiling and wall solutions are a fast and simple way to create beautiful, comfortable spaces. Easy to install and durable, they protect people from noise and the spread of fire while making a constructive contribution towards a sustainable future.

Project Name: **Westview High School Shop**
Project Number: _____
Location: **Portland, Oregon**
Submitted To: **Otak Architects**
Attn: **Amy Scheckla-Cox**
Address: **amy.scheckla-cox@otak.com**
Phone Number: **(503) 287-6825**
Section Number: **095113**
Section Title: **Acoustical Panel Ceilings**
Paragraph(s): **2.3**
Specification Page(s): **1 - 5**

Bid Date: **4/2/2020**

Request Date: **March 20, 2020**
Submitted By: **Sarah Lyons**
Company: **ROCKFON LLC**
Address: **4849 S. Austin Ave.**
Chicago IL, 60638
Phone Number: **(800) 323-7164**
Local Distributor: **Valhalla Construction Products**
Address: **5904 NE 112th Ave**
Portland, OR 97220
Phone Number: **(503) 387-5773**

Additional support materials included: ☒ Product Data

☐ Samples

☐ Other:

Specified Product ACT-1	Product:	Armstrong School Zone Fine Fissured	Proposed Product ACT-1	Product:	Rockfon Artic
	Item Number:	1714		Item Number:	601
	Size:	2x4		Size:	2x4
	Edge Detail:	Square Lay-in		Edge Detail:	Square Lay-in
	Color:	White		Color:	White
	NRC:	.70		NRC:	.75
	LR:	.82		LR:	.85
	Warranty:	Only valid when combined with Armstrong suspension systems.		Warranty:	30 years on ceiling tiles; 40 years when combined with suspension systems.
	Other:	Made of paper; Additives for mold, mildew, sag, water, and fire resistance.		Other:	Made of stone wool; Naturally mold, mildew, sag, water, and fire resistant. Has a high end look with superior performance and competitive pricing.
Specified Suspension - 1	Product:	Armstrong Prelude XL	Proposed Suspension - 1	Product:	Rockfon Chicago Metallic Seismic 1200
	Size:	15/16		Size:	15/16
	Detail:	Heavy Duty		Detail:	Heavy Duty
	Color:	White		Color:	White
	Material:	Steel		Material:	Steel
	Warranty:	Only valid when combined with Armstrong ceiling tiles.		Warranty:	40 years on suspension systems, regardless of the ceiling tile manufacturer used.

Approved:

Print Name

Signature

Date

SUBSTITUTION REQUEST

*The Construction Specifications Institute
Northwest Region*

TO: Otak Architects Attn: Amy Scheckla-Cox

PROJECT: Westview High School Shop Portland, Oregon

SPECIFIED ITEM: Armstrong School Zone Fine Fissured 1714

<u>095113</u>	<u>1 - 5</u>	<u>2.3</u>	<u>Acoustical Panel Ceilings</u>
Section No.	Page	Paragraph	Description

PROPOSED SUBSTITUTION: Rockfon Artic 601

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identifying applicable portions.

Attached data also includes description of changes to Contract Documents that proposed substitution requires for proper installation.

Undersigned certifies that the following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on Drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts are available locally or are readily obtainable for proposed substitution.

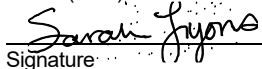
Undersigned further certifies that function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees that, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by

Sarah Lyons

Name (Print)



Signature

Valhalla Construction Products

Firm Name

5904 NE 112th Ave

Address

Portland, OR 97220

City, State, Zip

03/20/2020

Date

(503) 387-5773

Telephone

Fax

General Contractor (if after award of Contract)

For use by A/E:

☐ Approved

☐ Approved as Noted

☒ Not Approved

☐ Received Too Late

Chris Hansen

By

3/30/20

Date

Remarks

Attachments



0.75
NRC

Rockfon Artic®



Edge designation		Item number	Modular size (nominal)	lbs/sqft	sqft/carton	NRC	AC	Fire Class	Light Reflectance	Sag resistance (relative humidity)	Low VOC	Recycled Content
 Square Lay In	SO	600	2' x 2' x 5/8"	0.38	112	0.75	-	A	0.85	up to 100%	✓	up to 37%
	SQ	601	2' x 4' x 5/8"	0.38	112	0.75	-	A	0.85	up to 100%	✓	up to 37%
	SQ	609	20" x 60" x 3/4"	0.45	83.33	0.75	-	A	0.85	up to 100%	✓	up to 37%
	SQ	610	2' x 5' x 3/4"	0.45	100	0.75	-	A	0.85	up to 100%	✓	up to 37%
 Square Tegular Narrow	SLN	620	2' x 2' x 5/8"	0.47	56	0.75	-	A	0.85	up to 100%	✓	up to 37%
	SLN	621	2' x 4' x 5/8"	0.47	112	0.75	-	A	0.85	up to 100%	✓	up to 37%
 Square Tegular	SL	660	2' x 2' x 5/8"	0.47	56	0.75	-	A	0.85	up to 100%	✓	up to 37%
	SL	661	2' x 4' x 5/8"	0.47	112	0.75	-	A	0.85	up to 100%	✓	up to 37%

15/16" Suspension Systems	9/16" Suspension Systems
1200, 200 and Fire rated systems	4000, 4500, 4600 and Fire rated systems
 SQ SL	 SQ SLN - Tempra SLN - Ultraline 1/4" SLN - Ultraline 1/8"

Stone wool panel performance properties*

LEED® v4 highlights**

Materials and Resources (MR)

Waste Management Planning	✓
Interiors Life Cycle Impact Reduction	✓
Environmental Product Declarations	✓
Sourcing of Raw Materials	✓
Material Ingredients	✓
Waste Management	✓

Indoor Environmental Quality (EQ)

Low-Emitting Materials	✓
Interior Lighting	✓
Acoustic Performance	✓

Material

Stone wool (Mineral Wool) ceiling tiles with factory painted glass scrim surface

ASTM E1264 CLASSIFICATION: Type XX - Stone wool base with membrane-faced overlay, Pattern G



Fire Performance

Surface burning characteristics:
UL723 (ASTM E84) Flame Spread Index: 0
Smoke Developed Index (UL Labeled): 5
CAN/ULC S102 Flame Spread Index: 5
Smoke Developed Index: 0



Environment

Fully recyclable



Thermal Insulation

R Value (BTU Units):
2.2 - 2.6
RSI Value (Watts Units):
0.39 - 0.46



VOC Emissions

All Rockfon stone wool acoustic solutions are GREENGUARD Gold low VOC certified and meet the State of California's Department of Public Health Services Standard Practice for Specification Section 01350 (California Section 01350) for testing chemical emissions.

Selected potential applications: LEED, WELL, CHPS, Green Globes, BREEAM Int. and CALGreen.



Warranty Information

30-Year Limited Product Warranty.
See www.rockfon.com



Hygiene

Stone wool provides no sustenance to microorganisms



Cleaning

- Vacuum

Additional Information

Further product details, including installation information, can be found on www.rockfon.com

* All exceptions to above listed properties will be stated on products' page

** More information on LEED values can be found on the LEED v4 Solution Guide at www.rockfon.com

SUBSTITUTION REQUEST

The Construction Specifications Institute
Northwest Region

TO: Otak Architects Attn: Amy Scheckla-Cox

PROJECT: Westview High School Shop Portland, Oregon

SPECIFIED ITEM: Armstrong Prelude XL

<u>095113</u> Section No.	<u>1 - 5</u> Page	<u>2.3</u> Paragraph	<u>Acoustical Panel Ceilings</u> Description
------------------------------	----------------------	-------------------------	---

PROPOSED SUBSTITUTION: Rockfon Chicago Metallic Seismic 1200

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of request including identifying applicable portions.

Attached data also includes description of changes to Contract Documents that proposed substitution requires for proper installation.

Undersigned certifies that the following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown on Drawings.
2. Undersigned pays for changes to building design, including engineering design, detailing and construction costs caused by proposed substitution.
3. Proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
4. Maintenance and service parts are available locally or are readily obtainable for proposed substitution.

Undersigned further certifies that function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees that, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Submitted by

Sarah Lyons

Name (Print)

Sarah Lyons

Signature

Valhalla Construction Products

Firm Name

5904 NE 112th Ave

Address

Portland, OR 97220

City, State, Zip

03/20/2020

Date

(503) 387-5773

Telephone

Fax

General Contractor (if after award of Contract)

For use by A/E:

☐ Approved

☐ Approved as Noted

☒ Not Approved

☐ Received Too Late

Chris Hansen

By

3/20/20

Date

Remarks

Attachments

1999 Edition

Chicago Metallic® 1200 15/16"

Acoustical ceiling suspension system



Ideal for: Retail, classrooms, general interiors.

Performance Properties:

- Acoustical grid system comes in intermediate and heavy duty designs with stab-end cross tees
- Fire rated components are manufactured with expansion reliefs, making it suitable for fire-rated ceiling assemblies
- System available in (1200) non-fire rated, (1250) fire rated, and in (1200HRC) high recycled content
- Sustainable: Minimum 25% recycled content, 100% locally recyclable
- Chicago Metallic® suspension systems meet a Class-A flame spread rating in accordance with ASTM standard E1264-08

Chicago Metallic® 1200 15/16"

LEED® V4 HIGHLIGHTS


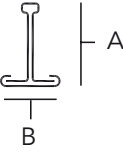
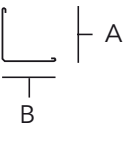
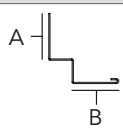
Materials and Resources (MR)

- Waste Management ✓ Planning ✓
- Interiors Life Cycle Impact Reduction ✓
- Environmental Product Declarations ✓
- Sourcing of Raw Materials ✓
- Material Ingredients ✓
- Waste Management ✓

Indoor Environmental Quality (EQ)

- Low-Emitting Materials ✓
- Interior Lighting ✓
- Acoustic Performance ✓

RECYCLED CONTENT: UP TO: 65%

Detail	Product Number	Length	Height (A)	Face (B)	Grid Coupling Type	Slotting / Class	Fire Rated	Seismic	Recycled Content
Main Runners									
	216.01H	120"	1-1/2"	15/16"	Bayonet-End	6" OC, ID	-	C	25
	299.01H	120"	1-1/2"	15/16"	Bayonet-End	10" OC, ID	✓	C	25
	200.XXZ.01	144"	1-41/64"	15/16"	Bayonet-End	6" OC, HD	-	C, DEF	25
	200.XXZ.01HRC	144"	1-41/64"	15/16"	Bayonet-End	6" OC, HD	-	C, DEF	65
	211.01Z	144"	1-1/2"	15/16"	Bayonet-End	6" OC, ID	-	C	25
	250.01Z	144"	1-1/2"	15/16"	Bayonet-End	6" OC, ID	✓	C	25
	270.XXZ.01	144"	1-41/64"	15/16"	Bayonet-End	6" OC, HD	✓	C, DEF	25
Cross Tees									
	1211.01Z	4"	1-1/2"	15/16"	Stab-End	No Slots	-	C, DEF	25
	1212.01Z	6"	1-1/2"	15/16"	Stab-End	No Slots	-	C, DEF	25
	1251.01H	12"	1-1/2"	15/16"	Stab-End	No Slots	✓	C, DEF	25
	1257.01Z	20"	1-1/2"	15/16"	Stab-End	No Slots	✓	C, DEF	25
	1252.01HRCZ	24"	1-1/2"	15/16"	Stab-End	No Slots	-	C, DEF	65
	1202.01Z	24"	1-5/16"	15/16"	Stab-End	No Slots	-	C, DEF	25
	1252.01Z	24"	1-1/2"	15/16"	Stab-End	No Slots	✓	C, DEF	25
	1258.01H	30"	1-1/2"	15/16"	Stab-End	No Slots	✓	C, DEF	25
	1253.01H	36"	1-1/2"	15/16"	Stab-End	12" OC	✓	C, DEF	25
	1210.01Z	48"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	25
	1213.01H	48"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	25
	1214.01Z	48"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	25
	1254.01Z	48"	1-1/2"	15/16"	Stab-End	12" OC	✓	C, DEF	25
	1274.01Z	48"	1-1/2"	15/16"	Stab-End	No Slots, HD	✓	C, DEF	25
	1280.01H	48"	1-1/2"	15/16"	Stab-End	3 Slots 12" OC	-	C, DEF	25
	1214.01HRCZ	48"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	65
	1207.01H	60"	1-1/2"	15/16"	Stab-End	6" OC	-	C, DEF	25
	1296.01H	60"	1-1/2"	15/16"	Stab-End	5 slots: midpoint, 10" each side of midpoint, and 6" from each end	✓	C, DEF	25
	1236.01H	72"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	25
	1278.01H	96"	1-1/2"	15/16"	Stab-End	12" OC	-	C, DEF	25
Wall Angles & Channels									
	1420.01	144"	15/16"	15/16"	-	-	-	C, DEF	25
	1425.01	144"	2"	2"	-	-	-	C, DEF	25
	1428.01	144"	1"	2"	-	-	-	C, DEF	25
	1430.01	144"	7/8"	7/8"	-	-	-	C	25
	21420.01	144"	15/16"	15/16"	-	-	-	C, DEF	25
	1420.01HRC	144"	15/16"	15/16"	-	-	-	C, DEF	65
	1480.01HRC	144"	9/16"	15/16"	-	-	-	C, DEF	65
	1454.01	120"	1-4.75/8"	15/16"	-	-	-	C, DEF	25
Shadow Moldings									
	1460.01	120"	3/4"	3/4"	-	3/8" Reveal	-	C	25
	1461.01	120"	3/4"	3/4"	-	3/4" Reveal	-	C	25
	1466.01	144"	1-3/4"	1-1/4"	-	3/4" x 1/4" Reveal	-	C	25
	1469.01	120"	15/16"	9/16"	-	3/8" Reveal	-	C	25

Available in the following standard colors, Rockfon® Color-all™ colors, and RAL color options.



01 White



08 Black



44 Satin Silver



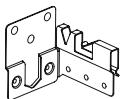
Color-all



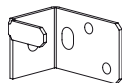
Packaging

Product Number	Pieces per Carton	Ft per Carton	Lbs per Carton	Cartons per Pallet	Lbs per Pallet
Main Runners					
216.01H	25	250	62	28	1736
299.01H	25	250	65	28	1820
200.XXZ.01	20	240	71.2	30	2136
200.XXZ.01HRC	20	240	60	30	1800
211.01Z	20	240	60	30	1800
250.01Z	20	240	60.8	30	1824
270.XXZ.01	20	240	72.8	30	2184
Cross Tees					
1211.01Z	60	20	5	10	50
1212.01Z	60	30	5	10	50
1251.01H	100	100	23	50	1150
1257.01Z	60	100	24	64	1536
1252.01HRCZ	75	150	24	50	1750
1202.01Z	60	120	20	64	1280
1252.01Z	60	120	28	64	1792
1258.01H	50	125	29	40	1160
1253.01H	50	150	36	50	1750
1210.01Z	60	240	42	30	1260
1213.01H	60	250	22	40	880
1214.01SST	50	200	46	40	1840
1214.01Z	60	240	528	30	1584
1254.01Z	60	240	52.8	30	1584
1274.01Z	60	240	732	30	2196
1280.01H	50	200	33	40	1320
1214.01HRCZ	50	200	61	40	2440
1207.01H	50	250	73	30	2310
1296.01H	50	250	57	30	1710
1236.01H	25	150	37	28	1036
1278.01H	25	200	46	28	1288
Wall Angles & Channels					
1420.01	42	504	69	30	2070
1425.01	20	240	82	30	2460
1428.01	20	240	54	30	1620
1430.01	30	360	49	40	1960
21420.01	25	300	41	30	1230
1420.01HRC	42	504	69	30	2070
1480.01HRC	25	300	39	30	1170
1454.01	20	200	67	32	2144
Shadow Moldings					
1460.01	40	400	64	32	2048
1461.01	40	400	90	32	2880
1466.01	20	240	61	20	1220
1469.01	40	200	77	Palletized to Order	Palletized to Order

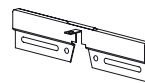
Accessories



1496.00
Seismic
Perimeter Clip
100 PCS/Carton



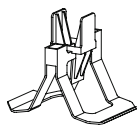
1493.00
Unopposed
Tee Clip
100 PCS/Carton



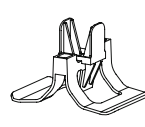
1494.00
Seismic
Separation Clip
100 PCS/Carton



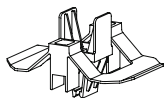
935.00
Hold Down Clip
for Various
Height Panels
1000 PCS/Carton



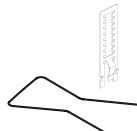
490.00
Hold Down Clip
for 0" - 3/4" Panels
100 PCS/Carton



491.00
Hold Down Clip for
3/4" - 1-1/4" Panels
150 PCS/Carton



492.00
Hold Down Clip
for 1-1/2" Panels
100 PCS/Carton



495.00
Facett™ Hold
Down Clip for
2" - 4" Panels
100 PCS/Carton



826.00H
2' Spacer Bar
80 LF/Carton



828.00H
4' Spacer Bar
160 LF/Carton



824.00H
4' Spacer Bar,
Notched at 2'
160 LF/Carton

Performance

Component Load Test Data and Material

Allowable Load per ASTM C635								
Main Tee	Length	Hanger Spacing						
			-	-	4'	5'	6'	-
216.01H	120"		-	-	ID	6.0	4.0	-
299.01H	120"		-	-	ID	6.0	4.0	-
200.XXZ.01	144"		-	-	HD	8.9	5.6	-
200.XXZ.01HRC	144"		-	-	HD	8.9	5.6	-
211.01Z	144"		-	-	ID	6.0	4.0	-
250.01Z	144"		-	-	ID	6.0	4.0	-
270.XXZ.01	144"		-	-	HD	8.9	5.6	-
Cross Tee	Length	1'	2'	3'	4'	5'	6'	8'
1252.01HRCZ	24"		40.5♦	-	-	-	-	-
1202.01Z	24"		21.5♦	-	-	-	-	-
1252.01Z	24"		40.5♦	-	-	-	-	-
1210.01Z	48"		-	-	9.3	-	-	-
1214.01Z	48"		-	-	14.0	-	-	-
1254.01Z	48"		-	-	14.0	-	-	-
1274.01Z	48"		-	-	17.0	-	-	-
1214.01HRCZ	48"		-	-	14.0	-	-	-
1207.01H	60"		-	-	-	8.5	-	-
1296.01H	60"		-	-	-	7.0	-	-
1236.01H	72"		-	-	-	-	8•	-
1278.01H	96"		-	-	-	-	-	1.8

To convert data into lb/ft², divide on center spacing of component into lb/ft.

♦ Limited by safety factor of 2.

* With midspan hanger wire support.

Light Fixture Load Test Data (based on 1/360 span deflection)

Light Fixtures	Main & Cross Tees - Allowable Fixture Weight – Pounds				
	Dimensions	211.01Z 1210.01Z	211.01Z 1213.01H	211.01Z 1280.01H	250.01Z 1254.01Z 270.XXZ.01 1254.01Z
	1' x 4'	56.4	56.4	59.1	55.6 67.6
	2' x 2'	34.8	34.8	36.1	49.6 52.8
	2' x 4'	47.2	47.2	37.1	64.0♦ 76.0♦

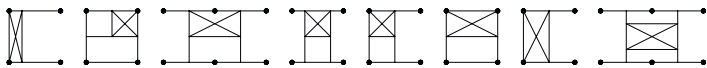
Consult specific U.L. design for allowable lighting configurations.

♦ Limited by safety factor of 2.

Non-Fire Rated Assemblies

Hanger Positions for Non-Fire Rated Situations

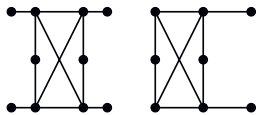
This illustrates hanger positions for single fixtures in a field. Provide extra hangers for tandem fixtures.



Fire Rated Assemblies

Hanger Positions for Fire Rated Situations

This illustrates hanger positions for single fixtures in a field. Provide extra hangers for tandem fixtures.



UL® Fire Rated Assemblies

Floor-Ceiling Type 1250

A202, A210, A211, A212, D203, D205, D209, D215, D216, D218, G007, G008, G022, G036, G201, G202, G204, G208, G209, G210, G211, G213, G214, G215, G216, G217, G218, G222, G227, G228, G229, G231, G234, G236, G241, G242, G243, G244, G248, G250, G255, G256, G258, G259, J201, L005, L006, L201, L202, L206, L208, L209, L210, L211, L212

Roof-Ceiling Type 1250

P201, P202, P203, P204, P206, P207, P210, P211, P213, P214, P215, P216, P217, P219, P225, P227, P228, P229, P230, P231, P235, P237, P238, P239, P241, P242, P244, P245, P246, P250, P251, P253, P255, P257, P259, P260, P261, P262, P264

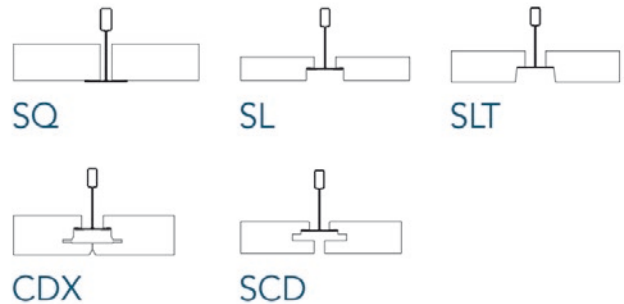
Material

ASTM C 635 Heavy Duty (HD) and Intermediate Duty (ID) main tee classifications; commercial quality HDG-30 steel, galvanized body and cap, 15/16" width, 1-1/2" height. Meets all seismic code requirements.

Note: A metallurgist should be consulted regarding the suitability of this product for the environmental conditions in which it is being installed.

Compatible Tile Edge Types

1200/1250/1200HRC Systems



Rockfon® is a registered trademark
of the ROCKWOOL Group.

11.2018 | All colour codes mentioned are based on the NCS - Natural Colour System® property of and used on license from NCS Colour AB, Stockholm 2012 or the RAL colour standard. Subject to alterations in range and product technology without prior notice. Rockfon accepts no responsibility for printing errors.



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