



Key Construction Services, LLC
4246 Albany Post Rd
Suite 1
Hyde Park, New York 12538
P: (845) 454-1192
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**Project: 22009- Vails Gate FD- Storage Building PH1 / Fire
Station PH2**
872 Blooming Grove Turnpike
New Windsor, New York 12553

Submittal #232001-1.0 - PD 232001 - Condensate Drain Piping

Distribution Summary

Distributed by Christopher Germano (Key Construction Services, LLC) on Mar 22, 2023

To Ronald Lombardo (Joseph Lombardo Plumbing, Heating & Cool), Michael Adorno (Joseph Lombardo Plumbing, Heating & Cool)

Message None

Attachments

Name	Response	Attachments	Comments
Emily Fusilero (H2M Architects + Engineers)	No Exceptions Taken	232001-1 - Condensate Drain Piping PD.pdf	please see attached

Revision	0	Submittal Manager	Christopher Germano (Key Construction Services, LLC)
Status	Closed	Date Created	Dec 14, 2022
Issue Date		Spec Section	232001 - Condensate Drain Piping
Responsible Contractor	Joseph Lombardo Plumbing, Heating & Cool	Received From	Ronald Lombardo (Joseph Lombardo Plumbing, Heating & Cool)
Received Date	Mar 9, 2023	Submit By	Mar 9, 2023
Final Due Date	Mar 24, 2023	Lead Time	
		Cost Code	
Location		Type	Product Information
Approvers	Joseph Manfredi (Key Construction Services, LLC), Emily Fusilero (H2M Architects + Engineers), Katie Margolies (H2M Architects + Engineers)		

Ball in Court

Distribution

Description B. Product Data: Provide data on pipe materials, pipe fittings, and accessories. Provide manufacturers catalog information.

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					232001 CONDENSATE DRAIN PIPING.pdf
Joseph Manfredi		Mar 10, 2023	Mar 10, 2023	Approved for Review	[OPEN] 232001-1 - Condensate Drain Piping PD.pdf

Name	Sent Date	Due Date	Returned Date	Response	Attachments
Emily Fusilero	Mar 10, 2023	Mar 24, 2023	Mar 21, 2023	No Exceptions Taken	232001-1 - Condensate Drain Piping PD.pdf (Current)
Comment	please see attached				
Katie Margolies	Mar 10, 2023	Mar 24, 2023		Pending	

SUBMITTAL REVIEW**CLIENT NAME:** Vails Gate Fire Department**PROJECT TITLE:** Vails Gate FD - New Firehouse**SUBMITTAL No.:** 232001-1**H2M PROJECT No.:** VGFD2001**SUBMITTAL NAME:** Condensate Drain Piping PD**SUBMITTAL REVIEW**

**REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS.
NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS
OF DIMENSIONS OR DETAILS**

- | | |
|---|---|
| <input checked="" type="checkbox"/> NO EXCEPTIONS TAKEN | <input type="checkbox"/> SUBMIT SPECIFIED ITEM |
| <input type="checkbox"/> MAKE CORRECTIONS NOTED
<small>(RESUBMISSION NOT REQUIRED)</small> | <input type="checkbox"/> NO ACTION TAKEN
<small>(REVIEW IS THE RESPONSIBILITY OF ANOTHER PARTY)</small> |
| <input type="checkbox"/> REVISE & RESUBMIT | <input type="checkbox"/> NO ACTION TAKEN
<small>(THIS SUBMITTAL IS NOT REQUIRED BY THE CONTRACT)</small> |
| <input type="checkbox"/> REJECTED - SEE REMARKS | <input type="checkbox"/> RECEIVED FOR RECORD |

Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating their work with that of all other trades; and performing the work in a safe and satisfactory manner.

H2M architects + engineers

Date: 03/21/2023

By: MJV

Rev.: 2020-05-20

Comments:

CONTRACTOR'S COMPANY NAME
ADDRESS

SUBMISSION TRANSMITTAL FORM
CLIENT NAME: Vails Gate Fire District
PROJECT TITLE: VGFD2001-New Firehouse

H2M PROJECT NO.: VGFD2001

Product, Item, or System Submitted:	Condensate Drain Piping Product Data		
Submission Date:	3/10/2023	Submission Log No.:	232001-1
Specification Section:	232001	Paragraph Reference:	1.04/B
Contract Drawing Reference(s):			
Manufacturer's Name:			
Manufacturer's Mailing Address:			
Manufacturer's Contact Information:	Name	() Tel. no.	Email
Supplier's Name:	Joe Lombardo Plumbing & Heating		
Supplier's Mailing Address:			
Supplier's Contact Information:	Name	() Tel. no.	Email
This item is a substitution for the specified item:	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
<p>KEY CONSTRUCTION SERVICES, LLC</p> <p>Project No: VGFD2001</p> <p><small>Reviewed for General Acceptance Only. This review does not relieve the Subcontractors or Suppliers of responsibility for making the work conform to the requirements of the contract. The Subcontractor and Suppliers are responsible for all dimensions, correct fabrication and accurate fit with the work of other trades.</small></p> <p><u>SUBJECT TO ARCHITECT AND OR ENGINEER APPROVAL</u></p> <p>Signed <i>Joseph Manfredi</i> (PM) Date: 3/10/2023</p> <p>Contractor's Approval Stamp with Signature & Date</p>		<p><u>Contractor's Brief Comments or Remarks</u> (attach separate letter as needed):</p> <p>By making this submission, we represent that we have determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving the item into the enclosed space, materials, catalog and model numbers and similar data and that we have checked and coordinated this submission with other work at or adjacent to the installed location in accordance with the requirements contained in the Contract Documents.</p>	

END OF SECTION 013300

Joe Lombardo
Plumbing & Heating of Rockland, Inc.

321 Spook Rock Road
Suffern, NY 10901
Ph. 845-357-6537 Fx 845-357-8529
E: info@josephlombardo.com
Website: www.josephlombardo.com
Rockland Cty. Plumbing #1000 Rockland Cty. Cooling # 1468
Westchester Cty. Plumbing #460 New Jersey State Plumbing #12702

TO: Key Construction
4246 Albany Post Rd. Suite 1
Hyde Park, NY 12538

LETTER OF TRANSMITTAL

DATE: 3-8-23 JOB NO.
ATTENTION: Joe Manfredi
RE: Vails Gate Firehouse

WE ARE SENDING YOU [] Attached [] Under separate cover via the following items:
[] Shop Drawings [] Prints [] Plans [] Samples [] Specifications
[] Copy of letter [] Change order

Table with 4 columns: EMAIL, DATE, No., DESCRIPTION. Row 1: 1, 3-8-23, 232003, THERMOMETERS AND PRESSURE GUAGES. Row 2: 232001, Condensate Drain Piping.

THESE ARE TRANSMITTED as checked below:
[] For approval [] No Exceptions Taken [] Resubmit copies for review
[] For your use [] Make Corrections Noted [] Submit copies for distribution
[] As requested [] Rejected [] Return corrected prints
[] For review and comment
[] FOR BIDS DUE 20 PRINTS RETURNED AFTER LOAN TO US

COPY TO: SIGNED: Ronald J. Lombardo

2.03- I - PVC PRIMER



4700 W. 160th St.
Cleveland, OH 44135
1-800-321-9532
1-800-321-9535
www.oatey.com

TECHNICAL SPECIFICATION

INDUSTRIAL GRADE PURPLE PRIMER

Page 1 of 2



TECHNICAL SPECIFICATION: Oatey Industrial Grade Purple Primer is an aggressive primer recommended for use with PVC and CPVC pipe and fittings. Purple Primer is specially formulated for use with large diameter pipe and fittings and is ideal for fabrication. This product is compliant with California South Coast Air Quality Management District (SCAQMD) Rule 1168 and Ozone Transport Commission (OTC) regulations for Volatile Organic Compound emission levels. **Note: This product is not for use in a system using or being tested by compressed air or gases.**



INGREDIENTS (CAS Number)

Acetone (67-64-1)
Cyclohexanone (108-94-1)
Methyl Ethyl Ketone (78-93-1)
Red Pigment (N/A)
Tetrahydrofuran (109-99-9)
Violet Pigment (N/A)

LISTINGS



NSF Standard 61
for PW, DWV, SEWER



IAPMO Listed

Meets ASTM Standard F 656

PHYSICAL/CHEMICAL PROPERTIES

Appearance	Purple Liquid
Density	7.15 ± 0.2 lbs/gallon
Shelf Life	3 years from manufacture date

Maximum VOC per SCAQMD 1168/316A or BAAQMD
Method 40: 550 g/L

PRODUCT NUMBER	SIZE	PACK	CARTON WEIGHT
30770	16 oz	24	25 lbs.
30771	32 oz.	12	24 lbs.
30772	Gallon	6	45 lbs.



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TECHNICAL SPECIFICATION

INDUSTRIAL GRADE PURPLE PRIMER

Page 2 of 2



DIRECTIONS FOR USE

Read all directions carefully before using this product.

- Do not breathe vapors. Use only in well ventilated area. If forced air ventilation is used, be sure it does not cause a fire hazard from solvent vapors. If adequate ventilation cannot be provided, wear a NIOSH-approved respirator for organic solvents.
- Do not use or store near heat, sparks, or flames. Do not smoke, eat or drink when using. Do not take internally. Vapors may accumulate in low places and may ignite explosively.
- Store and use at temperatures between -15°F and 110°F.
- Keep container closed when not in use.
- Avoid eye and skin contact - wear safety glasses with side shields and wear rubber gloves.
- **HANDLE WITH CARE! WILL STAIN MOST MATERIALS AND SURFACES.**
- Do not thin.

1. Square pipe ends and remove all burrs and dirt.
2. Check dry fit of pipe and fitting. Pipe should easily go 1/3 of the way into the fitting. If the pipe bottoms, it should be snug.
3. Use a suitable applicator at least 1/2 the size of the pipe diameter. For larger size pipe systems use a natural bristle brush or roller.
4. Apply thoroughly to outside surface of the pipe to the depth of the fitting and inside of the fitting socket.
5. Use appropriate solvent cement for the pipe being joined. **DO NOT TEST WITH AIR.**

This product is not for use with caustic or acidic chemical solutions. Consult Oatey Technical Department for more information.

PRECAUTIONS

Read all information carefully before using this product.

DANGER: EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRES. MAY IRRITATE EYES AND SKIN. VAPOR HARMFUL. MAY IRRITATE RESPIRATORY TRACT AND CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. HARMFUL OR FATAL IF SWALLOWED.

May cause irritation to eyes, skin, and nose, throat, and respiratory tract. May cause coughing, sore throat, difficulty breathing, headache, dizziness, nausea. Long term repeated overexposures to solvents may cause damage to the brain, nervous system, reproductive system, respiratory system, mucous membranes, liver, and kidneys. **KEEP OUT OF REACH OF CHILDREN.**

FIRST AID: If swallowed, **DO NOT INDUCE VOMITING.** Drink water and call a doctor or poison control center immediately. This product may be aspirated into the lungs and cause chemical pneumonitis, a potentially fatal condition. If contact with eyes, flush with water for 15 minutes and seek medical attention if irritation persists. If contact with skin, wash with soap and water. If inhaled and ill feelings develop, get fresh air and obtain medical attention if ill feelings persist. **FOR EMERGENCY FIRST AID INSTRUCTIONS CALL 1-877-740-5015.**

FIRE: Use dry chemical, foam, or carbon dioxide extinguisher. Water spray may be applied to reduce potential vapors or for cooling. Burning liquid extinguished with water will float and may re-ignite on surface of water. **SPILLS:** Remove all sources of ignition and ventilate area. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with absorbent material. Put absorbent material in covered, labeled metal containers. Dispose of in accordance with local regulations.

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems and is exposed to organic vapors found in solvent cements, cleaners or primers. Do not disinfect piping system with dry granules. Do not store dry granular calcium hypochlorite near solvent cements, cleaners or primers. **DO NOT REUSE EMPTY CONTAINER. KEEP OUT OF REACH OF CHILDREN.**

Refer to material safety data sheet for more information.

Before purchase and use of a product, review the product application and be certain the product, installation and use will be in compliance with any applicable codes and regulations.

2.03 - H PVC GLUE



4700 W. 160th St.
Cleveland, OH 44135
1-800-321-9532
1-800-321-9535
www.oatey.com

TECHNICAL SPECIFICATION

ALL WEATHER MEDIUM CLEAR PVC SOLVENT CEMENT

Page 1 of 2



TECHNICAL SPECIFICATION: Oatey All Weather Medium Clear PVC Solvent Cement is recommended for solvent welding all schedules and classes of PVC pipe and fittings up to 6" with interference fit. All Weather PVC Solvent Cement will remain free flowing and maintain fast set-up times at temperatures down to -15° F. All Weather PVC Solvent Cement can be used for potable water, sewer and drain, waste and vent systems. This product is compliant with California South Coast Air Quality Management District (SCAQMD) Rule 1168 and Ozone Transport Commission (OTC) regulations for Volatile Organic Compound emission levels. **Note: This product is not for use in a system using or being tested by compressed air or gases.**



INGREDIENTS (CAS Number)

Acetone(67-64-1)
Amorphous Silica (112945-52-5)
Cyclohexanone (108-94-4)
Methyl Ethyl Ketone (78-93-3)
PVC Resin (9002-86-2)
Tetrahydrofuran (109-99-9)

LISTINGS



NSF Standard 61
for PW, DWV, SEWER



IAPMO Listed

PHYSICAL/CHEMICAL PROPERTIES

Appearance	Clear Liquid
Viscosity	min. 500 cps @ 73° F ± 2° F
Density	7.89 ± 0.2 lbs/gallon
Lap Shear Strength (minimum per ASTM Standards)	
2 hours	250 psi
16 hours	500 psi
72 hours	900 psi
Set Up Time	
30° F to 50° F	3 – 4 minutes
50° F to 70° F	2 – 3 minutes
70° F to 90° F	1 – 2 minutes
Shelf Life	3 years from manufacture date

Maximum VOC per SCAQMD 1168/316A or BAAQMD
Method 40: 510 g/L

Meets ASTM Standard D 2564

PRODUCT NUMBER	SIZE	PACK	CARTON WEIGHT
31132	16 oz.	24	30 lbs.
31132D	16 oz.	24	30 lbs.
31133	32 oz.	12	29 lbs.
31135	Gallon – Wide Mouth	6	50 lbs.



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TECHNICAL SPECIFICATION

**ALL WEATHER
MEDIUM CLEAR
PVC SOLVENT CEMENT**

Page 2 of 2



DIRECTIONS FOR USE

Read all directions carefully before using this product.

- Do not breathe vapors. Use only in well ventilated area. If forced air ventilation is used, be sure it does not cause a fire hazard from solvent vapors. If adequate ventilation cannot be provided, wear a NIOSH-approved respirator for organic solvents.
- Do not use or store near heat, sparks, or flames. Do not smoke, eat or drink when using. Do not take internally. Vapors may accumulate in low places and may ignite explosively.
- Store and use at temperatures between -15°F and 110°F. At temperatures outside of this range, special care must be taken to prepare good joints and prevent exposures to solvents.
- Stir or shake before using; if jelly-like, don't use. Keep container closed when not in use.
- Avoid eye and skin contact - wear safety glasses with side shields and wear rubber gloves.
- Do not thin.

1. Square pipe ends and remove all burrs and dirt.
2. Check dry fit of pipe and fitting. Pipe should easily go 1/3 of the way into the fitting. If the pipe bottoms, it should be snug.
3. Use a suitable applicator at least 1/2 the size of the pipe diameter. For larger size pipe systems use a natural bristle brush or roller.
4. Clean pipe and fitting with a listed primer. **Where local codes permit**, priming step is not necessary.
5. Apply liberal coat of cement to pipe to the depth of the socket; leave no uncoated surface.
6. Apply a thin coat of cement to inside of fitting; avoid puddling of cement. Puddling can cause weakening and premature failure of pipe or fitting. Apply a second coat of cement to the pipe.
7. Assemble parts QUICKLY. Cement must be fluid. If cement surface has dried, recoat both parts.
8. Push pipe FULLY into fitting using a 1/4 turning motion until pipe bottoms.
9. Hold pipe and fitting together for 30 seconds to prevent pipe push-out – longer at low temperatures. Wipe off excess.
10. Allow 15 minutes for good handling strength and 2 hours cure time at temperatures above 60°F before hydrostatic pressure testing up to 180 psi. Longer cure times may be required at temperatures below 60°F or with pipe diameters over 3". DO NOT TEST WITH AIR.

This product is not for use with caustic or acidic chemical solutions. Consult Oatey Technical Department for more information.

PRECAUTIONS

Read all information carefully before using this product.

DANGER: EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRES. MAY IRRITATE EYES AND SKIN. VAPOR HARMFUL. MAY IRRITATE RESPIRATORY TRACT AND CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. HARMFUL OR FATAL IF SWALLOWED.

May cause irritation to eyes, skin, and nose, throat, and respiratory tract. May cause coughing, sore throat, difficulty breathing, headache, dizziness, nausea. Long term repeated overexposures to solvents may cause damage to the brain, nervous system, reproductive system, respiratory system, mucous membranes, liver, and kidneys.

KEEP OUT OF REACH OF CHILDREN.

FIRST AID: If swallowed, **DO NOT INDUCE**

VOMITING. Drink water and call a doctor or poison control center immediately. This product may be aspirated into the lungs and cause chemical pneumonitis, a potentially fatal condition. If contact with eyes, flush with water for 15 minutes and seek medical attention if irritation persists. If contact with skin, flush with water and then use baby oil or Oatey Hand Cleaner to remove residue. If inhaled and ill feelings develop, get fresh air and obtain medical attention if ill feelings persist. **FOR EMERGENCY FIRST AID INSTRUCTIONS CALL 1-877-740-5015.**

FIRE: Use dry chemical, foam, or carbon dioxide extinguisher. Water spray may be applied to reduce potential vapors or for cooling. Burning liquid extinguished with water will float and may re-ignite on surface of water.

SPILLS: Remove all sources of ignition and ventilate area. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with absorbent material. Put absorbent material in covered, labeled metal containers. Dispose of in accordance with local regulations.

A fire or explosion may result if dry granular calcium hypochlorite is used to disinfect plastic piping systems and is exposed to organic vapors found in solvent cements, cleaners or primers. Do not disinfect piping system with dry granules. Do not store dry granular calcium hypochlorite near solvent cements, cleaners or primers. **DO NOT REUSE EMPTY CONTAINER. KEEP OUT OF REACH OF CHILDREN.**

Refer to material safety data sheet for more information.

Before purchase and use of a product, review the product application and be certain the product, installation and use will be in compliance with any applicable codes and regulations.

CHARLOTTE

PIPE AND FOUNDRY COMPANY

This is to certify that all Plastic Pipe and Fittings manufactured by Charlotte Pipe and Foundry Company are manufactured in the United States and conform to the following standards:

>>>

SCH. 40 PVC PIPE

ASTM D 1784, ASTM D 1785, ASTM D 2665
FHA UM 79a
FEDERAL SPECIFICATION L-P-320a
NSF STANDARD NO. 14 AND 61

SCH. 40 PVC DWV PIPE CELLULAR CORE

ASTM D 4396, ASTM F 891
NSF STANDARD NO. 14

SCH. 40 RePVC™ DWV PIPE

ASTM D 4396, ASTM F 1760
NSF STANDARD NO. 14

>>>

SCH. 40 PVC DWV FITTINGS

ASTM D 1784, ASTM D 2665, ASTM D 3311
FHA UM 79a
FEDERAL SPECIFICATION L-P-320a
NSF STANDARD NO. 14

PVC PRESSURE PIPE SDR-21 AND SDR-26

ASTM D 1784, ASTM D 2241
NSF STANDARD NO. 14 AND 61

PVC SCH. 40 PRESSURE FITTINGS

ASTM D 1784, ASTM D 2466
NSF STANDARD NO. 14 AND 61

PVC WELL CASING PIPE

ASTM D 1784, ASTM F 480
NSF STANDARD NO. 14 AND 61

PVC SCH. 80 PIPE

ASTM D 1784, ASTM D 1785, PVC 1120
NSF STANDARD NO. 14 AND 61

PVC SCH. 80 FITTINGS

ASTM D 1784, ASTM D 2467, ASTM D 2464,
ASTM F 1970
NSF STANDARD NO. 14 AND 61

PVC SEWER MAIN PIPE

ASTM D 1784, ASTM D 3034 SDR 35
ASTM D 3212, ASTM F 477

PVC SEWER MAIN PIPE CELLULAR CORE

ASTM D 4396, ASTM F 891 PS 50

PVC SEWER AND DRAIN PIPE

ASTM D 1784, ASTM D 2729

PVC THIN WALL PIPE AND FITTINGS

ASTM D 1784, ASTM D 2949
NSF STANDARD NO. 14

CPVC CTS FLOWGUARD GOLD® PIPE & FITTINGS

ASTM D 1784, ASTM D 2846
FHA UM-61a
NSF STANDARD NO. 14. AND 61
CSA LISTED ON SPECIFIED ITEMS

CPVC CTS REUZE™ PIPE

ASTM D 1784, ASTM D 2846
NSF STANDARD NO. 14.

CHEMDRAIN® CPVC SCHEDULE 40 PIPE AND FITTINGS

ASTM D 1784, ASTM F 2618
NSF STANDARD NO. 14

SCH. 40 ABS DWV PIPE CELLULAR CORE

ASTM D 3965, ASTM F 628
NSF STANDARD NO. 14

SCH. 40 ABS DWV FITTINGS

ASTM D 3965, ASTM D 2661, ASTM D 3311
FHA UM 79a
FEDERAL SPECIFICATION L-P-322b
NSF STANDARD NO. 14

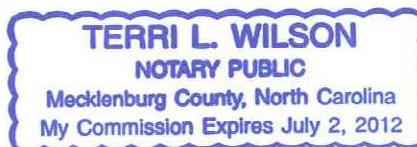
Very truly yours,

Hooper Hardison

Hooper Hardison, Executive Vice President

Terri L. Wilson

Notary Public
My commission expires July 02, 2012



5/12/2010