CONSTRUCTION MATERIALS
TECHNOLOGIES

LABORATORY TEST REPORT

Report for: JMB Industries, LLC
6340 Baker Blvd.
Richland Hills, TX 76118

Attention: Jim Brown

Product Name:	Pipe Prop® Plastic	**Manufacturer:**	JMB Industries, LLC
Project No.:	JMB-003-02-02	**Source:**	JMB Industries, LLC
Date Received:	July 7, 2015	**Date Tested:**	July 27, 2015

Purpose: Determine the water absorption of the plastic used with the Pipe Prop®. The APS-1 saddle, APS-2 saddle, and APS-1/-2 base were assessed.

Test Methods: Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment* and ASTM D 570: *Standard Test Method for Water Absorption of Plastics,* Section 7.1: *Twenty-Four Hour Immersion* procedure. Testing was modified to test the entire molded plastic parts in whole. The samples were conditioned for 24 hours at 122°F. Testing was conducted at 73.4°F using deionized water.

Sampling: Product samples provided by JMB Industries were received on July 7, 2015.

Specimen: For this testing, the Pipe Prop® APS-1 and APS-2 components were tested individually, and without Schedule 40 PVC pipe.

PRI Construction Materials Technologies, LLC. 6412 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail materialstesting@pricmt.com WebSite: http://www.pricmt.com

Results: Table 1: Water Absorption Results for Pipe Prop® APS-1 and APS-2

Sample	Results		
	Specimens	Average (% Weight)	St.Dev. (% Weight)
APS-1 Saddle	1	0.20	-
APS-2 Saddle	1	0.20	-
APS-1/-2 Base	2	0.16	-

Statement of Attestation:

Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment* as described herein. The laboratory test results presented in this report are representative of the material supplied.

Signed: _____
Zachary Priest, P.E.
Director

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	09/28/2015	4	NA

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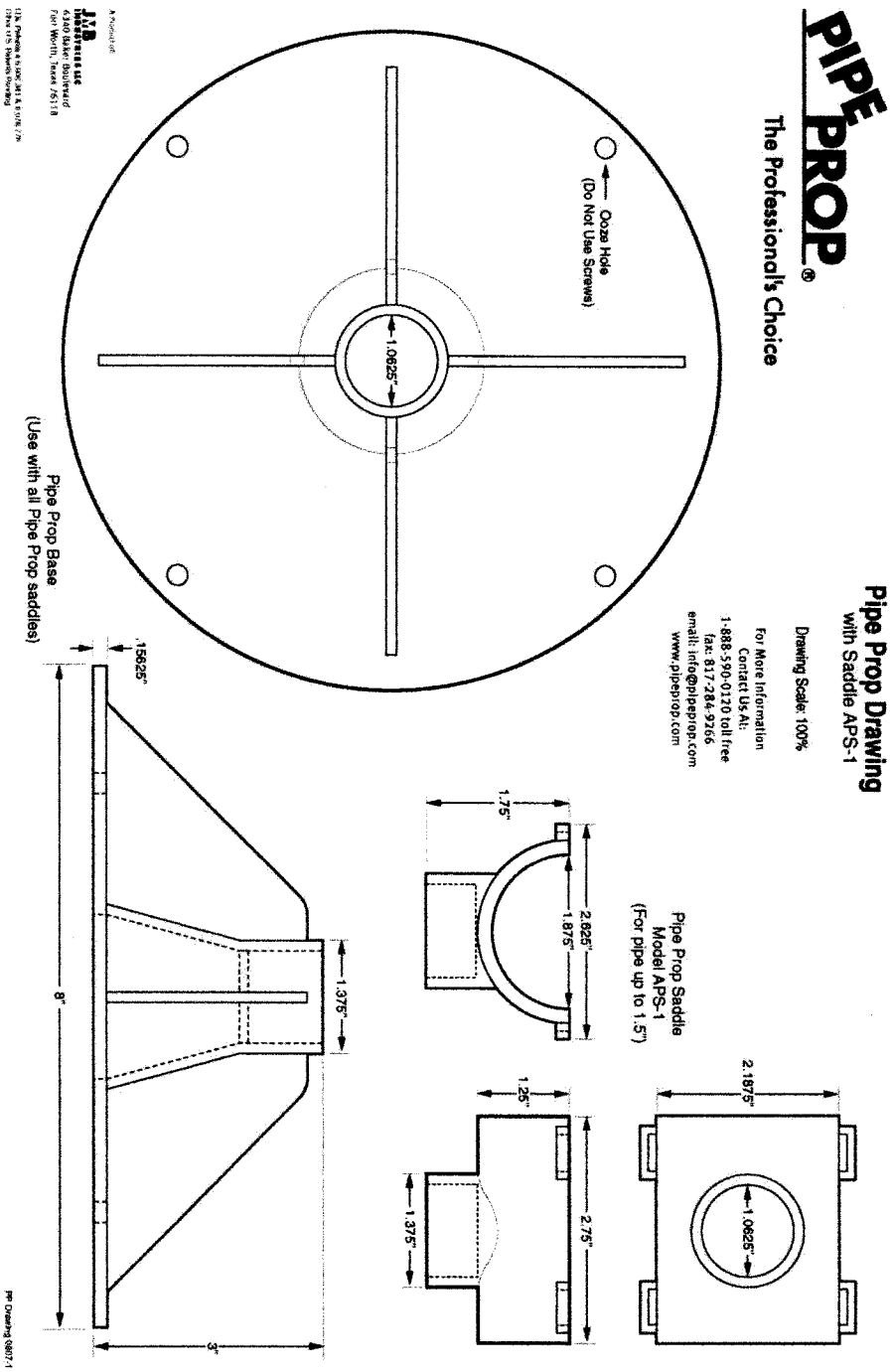
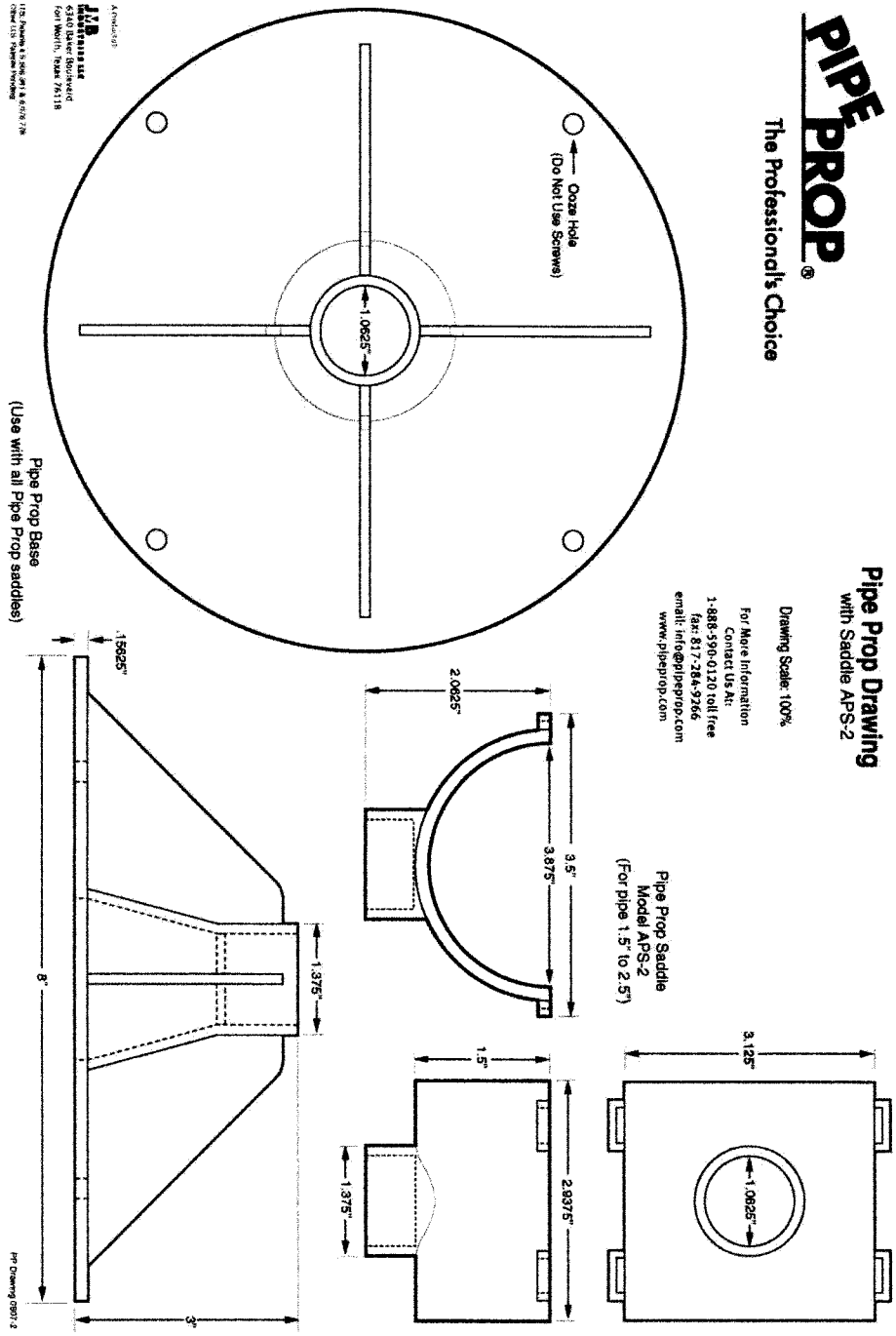


JMB-003-02-02 PRI-CMT Accreditations: IAS TL-189; Miami-Dade 11-0429.05; Florida TST5878; Los Angeles TA24819; CRRC



END OF REPORT

CONSTRUCTION MATERIALS
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LABORATORY TEST REPORT

Report for: JMB Industries, LLC
6340 Baker Blvd.
Richland Hills, TX 76118

Attention: Jim Brown

Product Name:	Pipe Prop®	**Manufacturer:**	JMB Industries, LLC
Project No.:	JMB-003-02-01	**Source:**	JMB Industries, LLC
Date Received:	July 7, 2015	**Dates Tested:**	July 27, 2015

Purpose: Determine the impact resistance of Pipe Prop® by performing a free falling drop test of the finished product at 0°F onto structural concrete.

Test Methods: Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment.* The specimen was equilibrated to 0°F and subsequently dropped onto structural concrete from a height of 48-inch. This process was repeated a total of three (3) times while changing the impact location of the specimen.

Sampling: Product samples provided by JMB Industries were received on July 7, 2015.

Specimen: The Pipe Prop® is a field assembled stantion. For this testing, the Pipe Prop® APS-1 was utilized with consisted of a 1.5" saddle attached to 1-inch O.D. (3/4-inch I.D.) Schedule 40 PVC pipe attached to the base. The overall height of the assembled Pipe Prop® was 10-inches. See Appendix A of this report for detailed drawings.

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Results: Table 1: Free Falling Drop Test Results for Pipe Prop® APS-1

Property	Test Method	Result	Requirement
Impact Resistance, *[Pass/Fail]* 0°F, after three (3) successive drops onto structural concrete	IAPMO IGC 298-2013	**Pass**	No visible cracking, fracture, or deformation of plastic or disengagement of foam base.

Statement of Attestation:

Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment* as described herein. The laboratory test results presented in this report are representative of the material supplied.

Signed: _____
Zachary Priest, P.E.
Director

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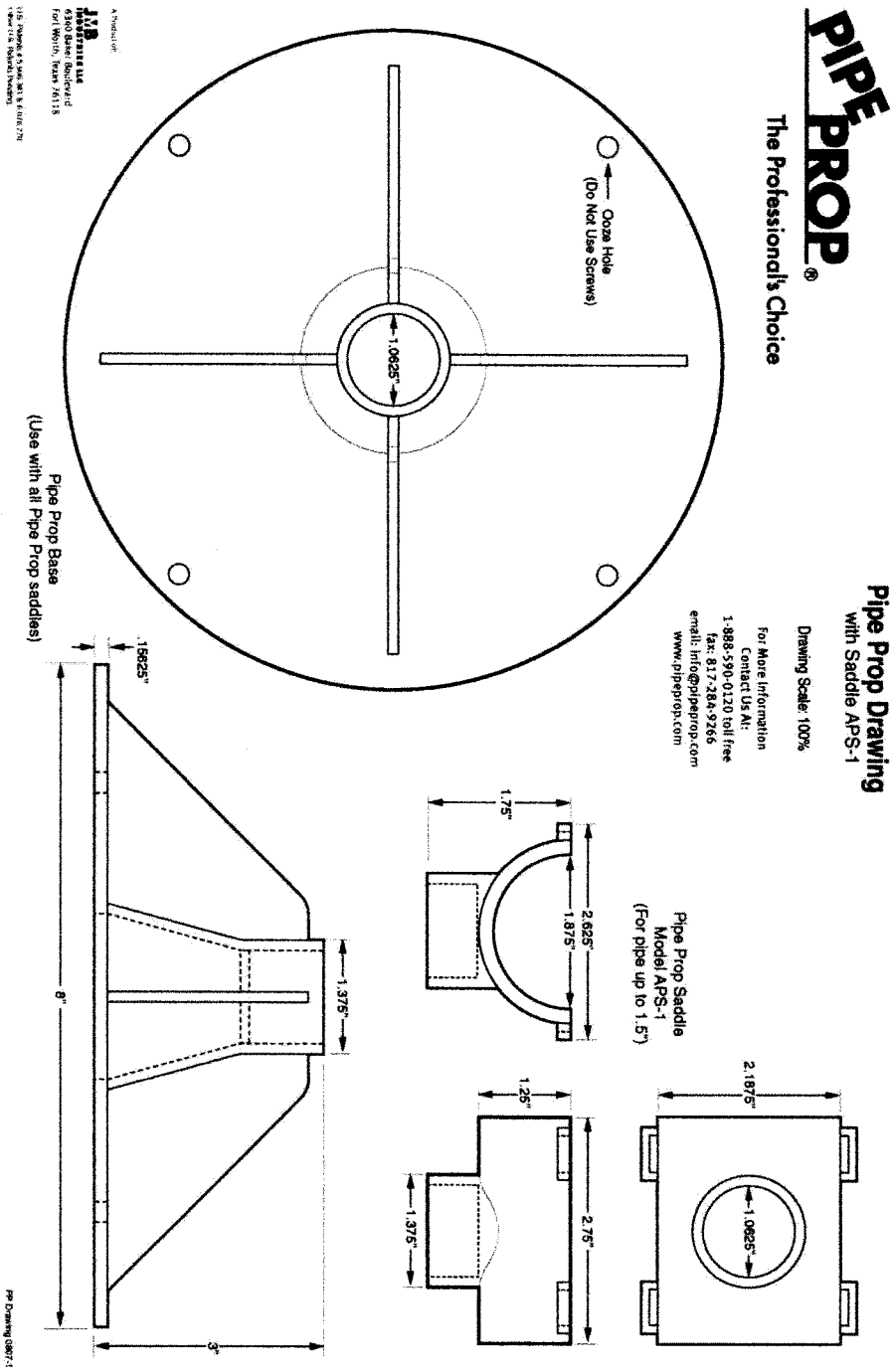

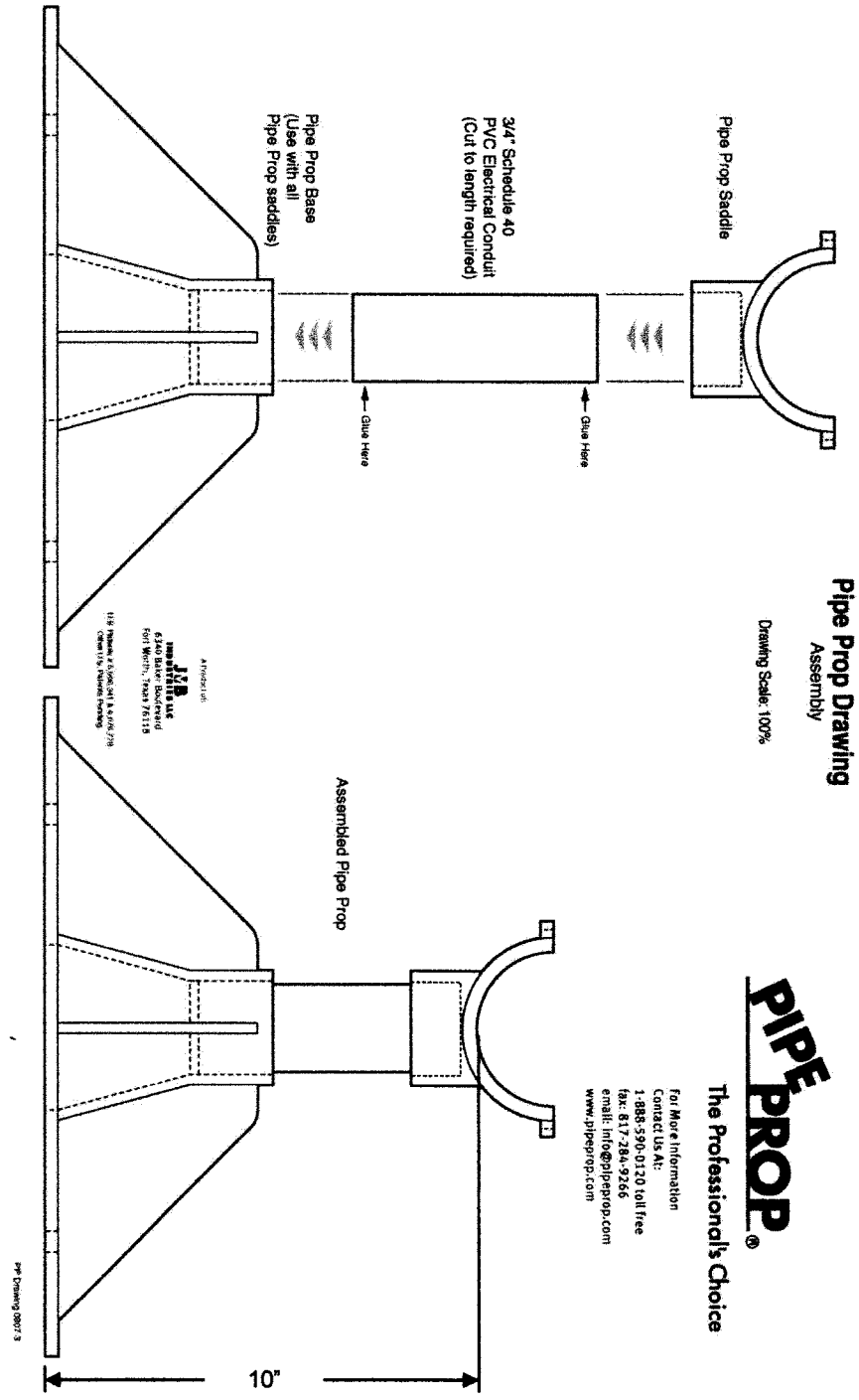

END OF REPORT

CONSTRUCTION MATERIALS
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LABORATORY TEST REPORT

Report for: JMB Industries, LLC
6340 Baker Blvd.
Richland Hills, TX 76118

Attention: Jim Brown

Product Name:	Pipe Prop®	**Manufacturer:**	JMB Industries, LLC
Project No.:	JMB-003-02-03	**Source:**	JMB Industries, LLC
Date Received:	July 7, 2015	**Dates Tested:**	July 27 – September 22, 2015

Purpose: Determine the load bearing resistance of Pipe Prop® by conducting uniaxial, dead load testing for continuous eight (8) hour period at elevated temperature (158°F).

Test Methods: Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment*. The specimen was equilibrated to 158°F for 1h prior to testing. The test load was then applied, at temperature, and maintained, continuously, for an eight (8) hour period. The creep rate is then calculated and reported for the final hour of testing.

Note – the testing is modified from the IAPMO IGC 298-2013 in the following manner:

1) Radiant heat was not used. Instead, the sample was placed in a heated chamber, equilibrated to the test temperature, before and during load application.
2) The load applied to sample was varied based on the height of the assembled Pipe Prop®. For a 10" tall Pipe Prop®, 90 lbf was applied. For a 6" tall Pipe Prop®, 190 lbf was applied. For a 3" tall Pipe Prop, 1,000 lbf was applied.

Sampling: Product samples provided by JMB Industries were received on July 7, 2015.

Specimen: The Pipe Prop® is a field assembled stantion. For this testing, the Pipe Prop® APS-1 was utilized with consisted of a 1.5" saddle attached to 1-inch O.D. (3/4-inch I.D.) Schedule 40 PVC pipe attached to the base. See Appendix A of this report for detailed drawings.

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Results: Table 1: Load Bearing Resistance for Pipe Prop® APS-1

Property	Test Method	Results (Pass/Fail)	Requirement
Load Bearing Resistance; 8 hr uniaxial dead load applied at 158°F;	IAPMO IGC 298-2013		
90 lbf load applied to 10" tall Pipe Prop®		Pass[1]	Average creep rate over the final hour of testing ≤ 0.005 in./hr
190 lbf load applied to 6" tall Pipe Prop®		Pass[2]	
90 lbf load applied to 3" tall Pipe Prop®		Pass[3]	

Notes: 1) Creep rate over the last hour was 0.003 in./hr
2) Creep rate over the last hour was 0.0007 in./hr
3) Creep rate over the last hour was 0.003 in./hr

Statement of Attestation:

Testing was conducted in accordance with IAPMO IGC 298-2013 *Rooftop Support Blocks for Piping and Mechanical Equipment* with modifications described herein. The laboratory test results presented in this report are representative of the material supplied.

Signed: _____
Zachary Priest, P.E.
Director

Report Issue History:

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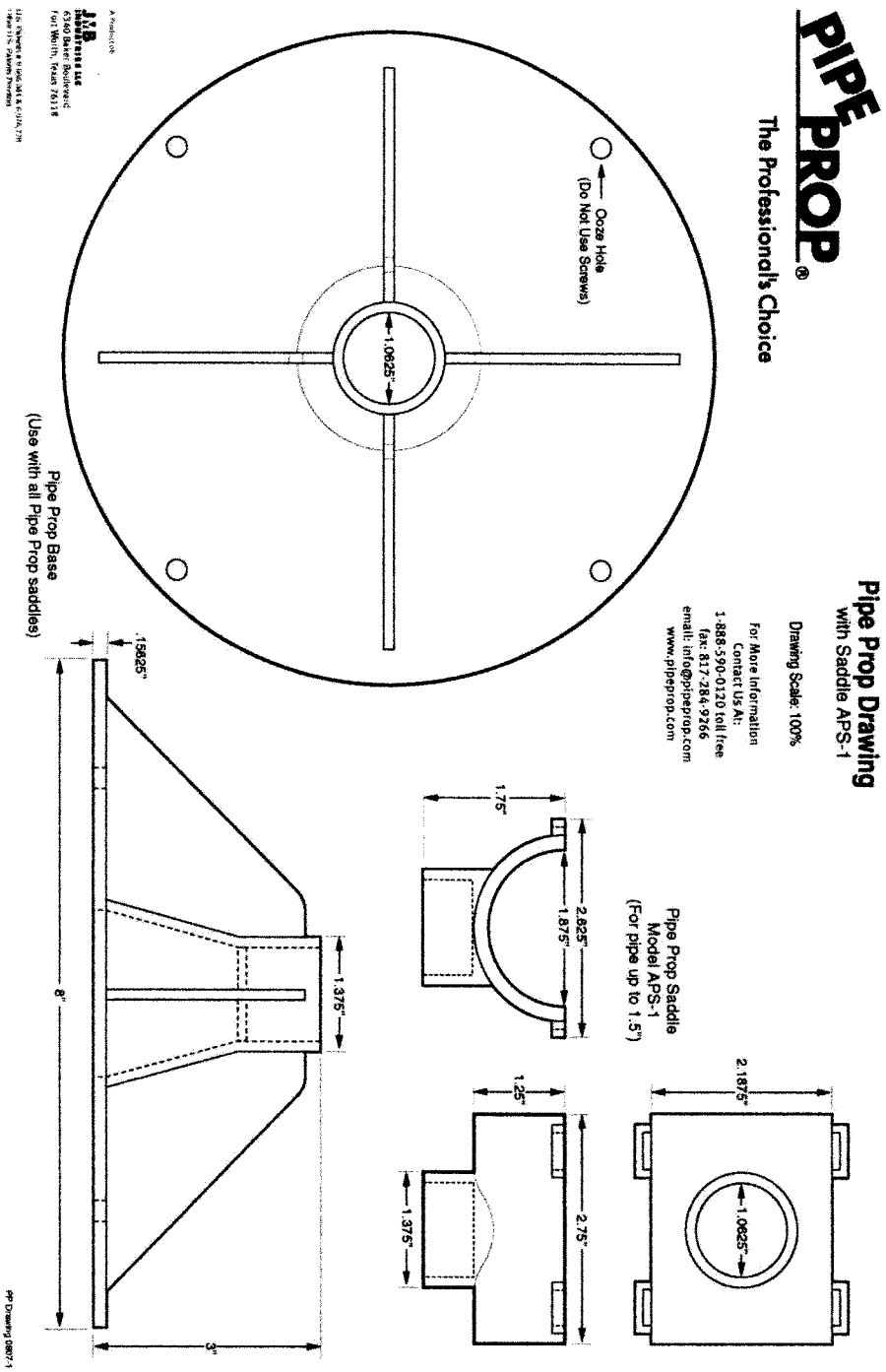
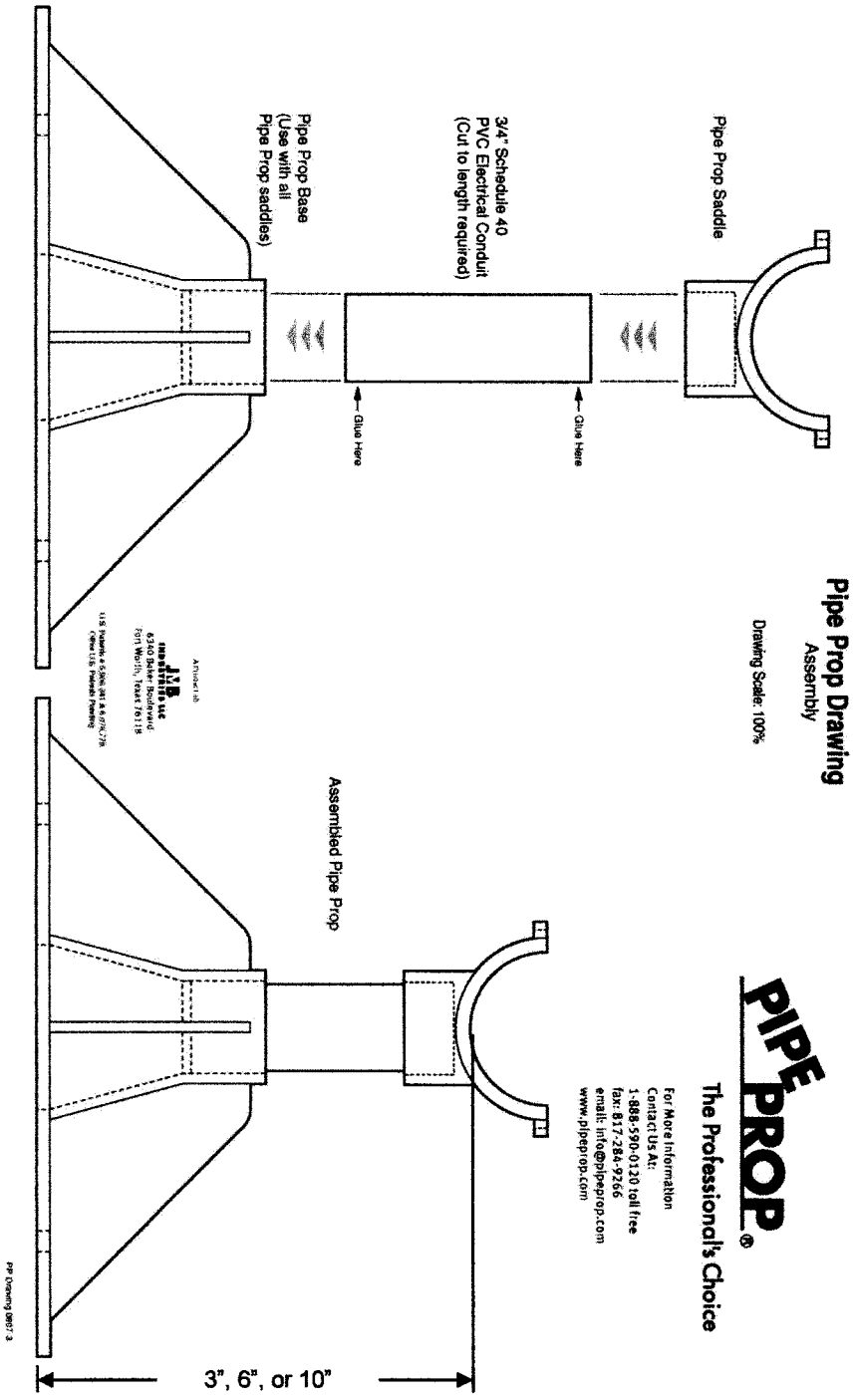


JMB-003-02-03 PRI-CMT Accreditations: IAS TL-189; Miami-Dade 11-0429.05; Florida TST5878; Los Angeles TA24819; CRRC



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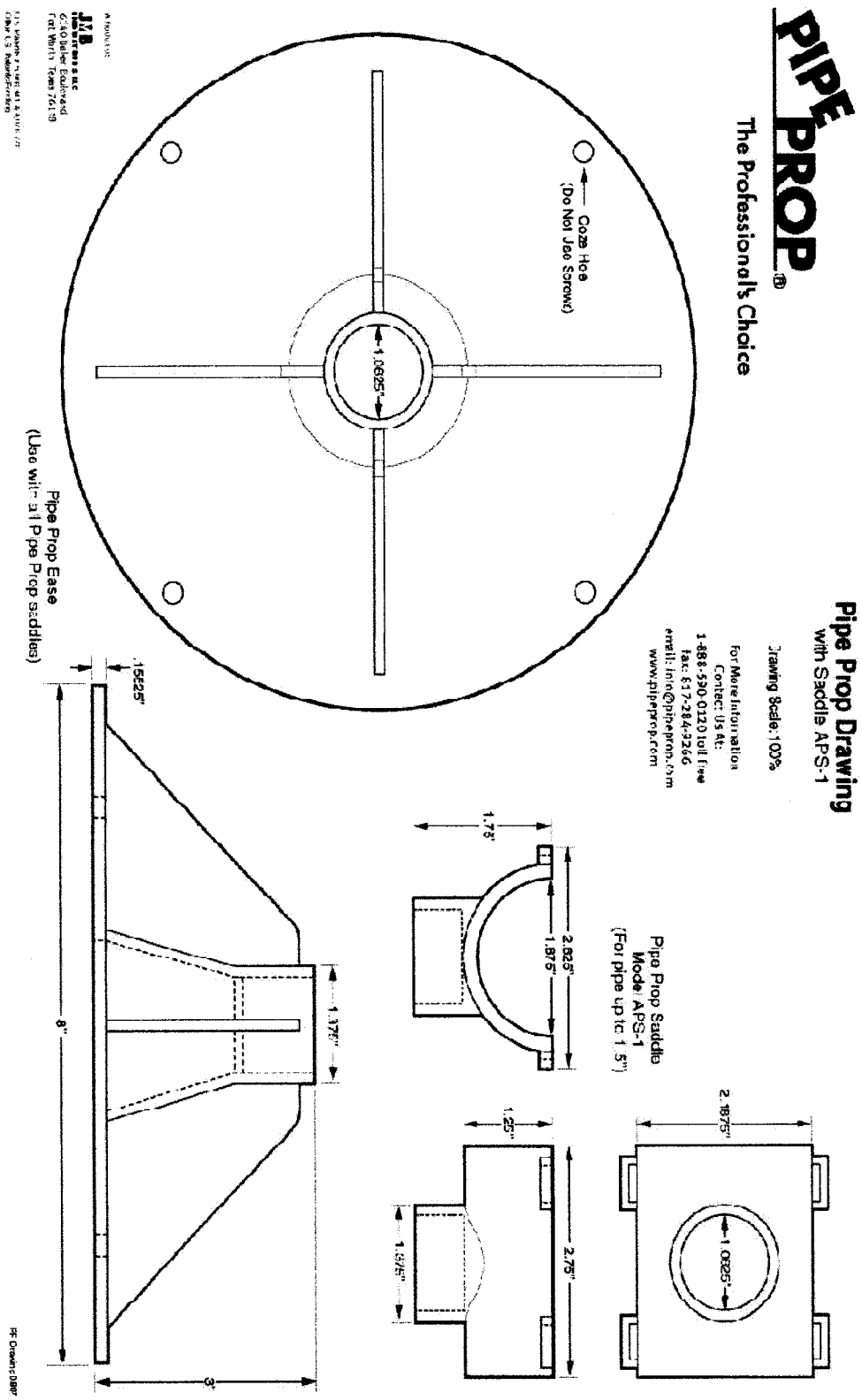
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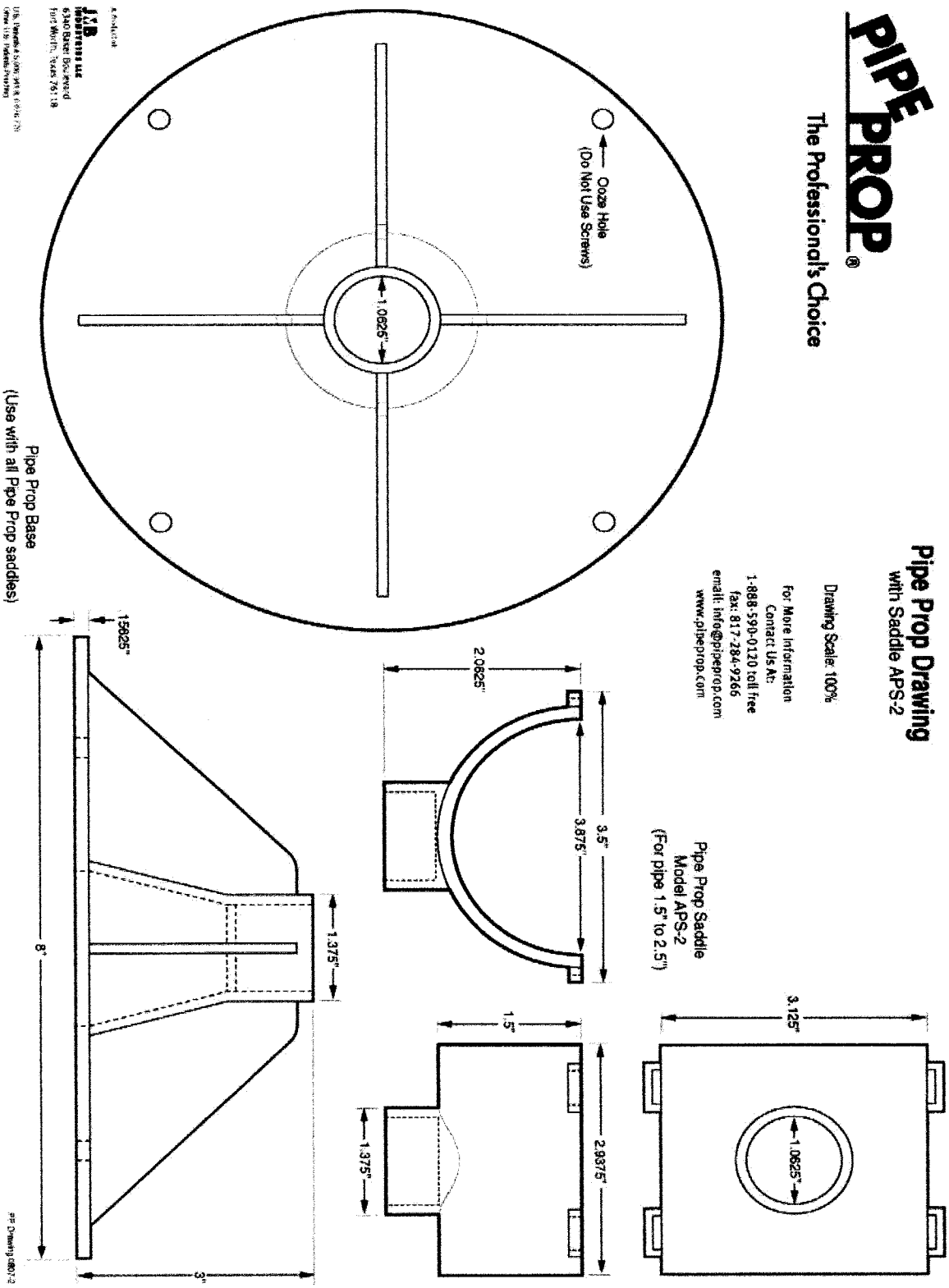
(Use with all Pipe Prop saddles)
.15625"
8"
1.375"
3"
Pipe Prop Saddle
Model APS-1
(For pipe up to 15")
1.78"
2.825"
1.875"
1.25"
2.75"
1.575"
2.1875"
1.0625"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Model APS-2
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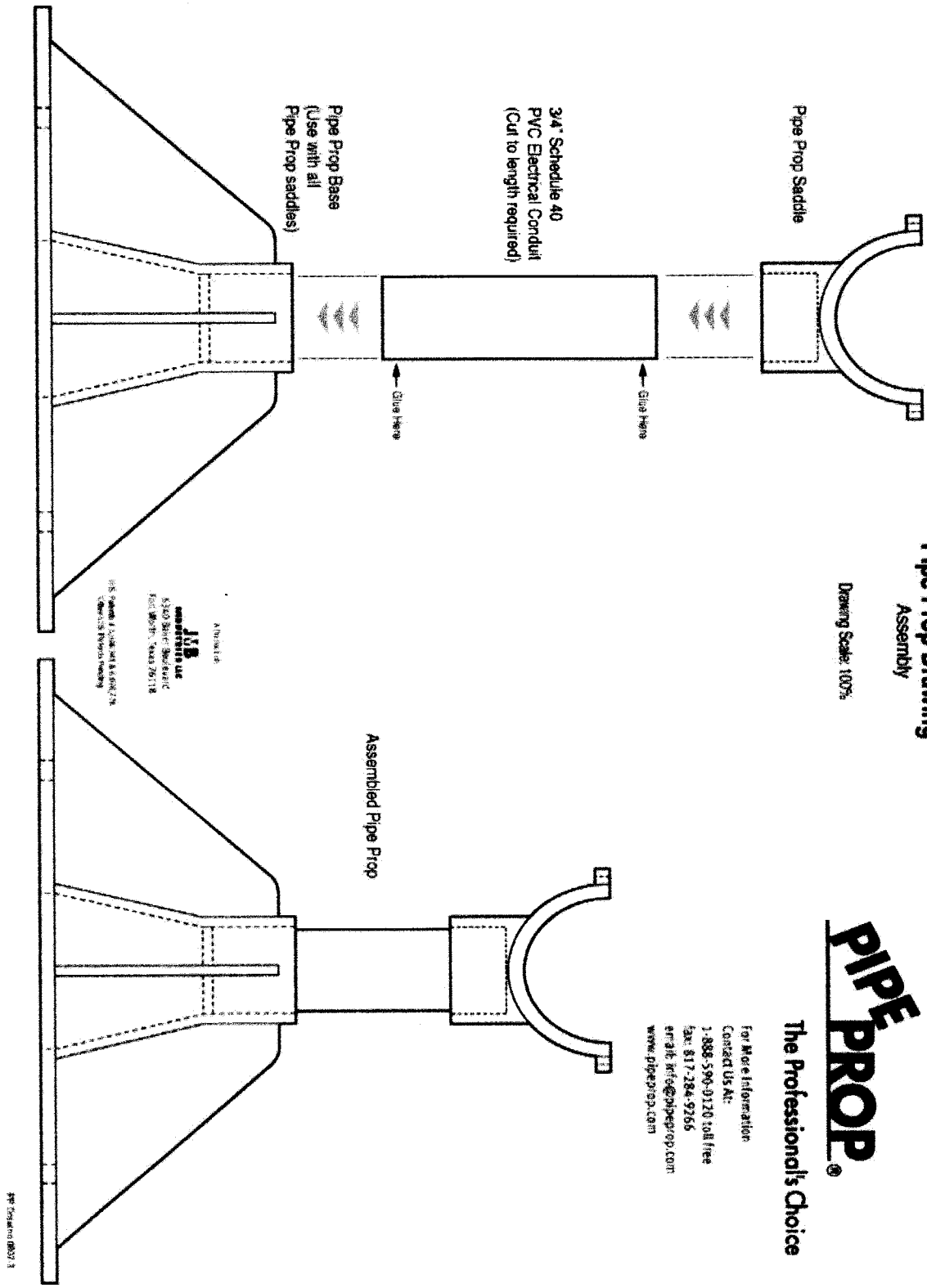
3.5"
3.875"
3.125"
1.0625"
1.5"
1.375"
2.9375"


Pipe Prop Drawing
Assembly
Drawing Scale: 100%
Pipe Prop Saddle
3/4" Schedule 40
PVC Electrical Conduit
(Cut to length required)
Glue Here
Glue Here
Pipe Prop Base
(Use with all
Pipe Prop saddles)
Assembled Pipe Prop
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