



HANSE | **HALT**
HASS
Environmental, Inc.

Site Preparation Manual For VTC Chambers

Hanse Environmental, Inc.

235 Hubbard Street
Allegan, MI 49010-1320
Phone: +1-269-673-8638
Fax: 866-272-6512
Email: info@HanseEnv.com

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Disclaimer

Please note all information provide in this manual is provided with out warranty or guaranty, and can be changed with out notice. Please consult all local code requirements before installation.

Introduction

This manual is for the preparation of the facility for the Hanse Environmental family of HALT/HASS chambers and vibration systems. The material in this manual covers all of our equipment, so not all will be applicable to your unit. Please review carefully to make sure that you are covering your personal needs.

Model Numbering

Our numbering system has been changed over the years. This document will cover the VTC series (Vibration Temperature Chamber) or the previous TVC series (Temperature Vibration Chamber). There have been chambers that we have called TC (Thermal chamber) and HC (heat chamber) that will also be covered herein. We also ship VC series (Vibration chamber – meaning a unit with no thermal capability). We also ship vibration systems to be installed in other chamber systems.

The chambers have been described using the square foot area of the surface of the vibration table. For instance,

VTC-1	12" x 12" or 15" x 20" table
VTC-1.5	20" x 20" table (or slightly smaller in some cases)
VTC-4	2' x 2' table
VTC-9	3' x 3' table
VTC-16	4' x 4' table
VTC-25	5' x 5' table

The maximum g level at laboratory ambient temperature (approx. 25 C) is 100 gRMS for all table models. The maximum g level will drop after you exceed 70 C.

Electric Requirements

Follow all NEC and Local Code requirements for service disconnects and sizing. Service size should be selected from the [Utilities & Size Requirements](#) section of this manual.

Air Requirements

Follow all local code requirements for airline installation if any present. When selecting airline size please take in account airflow requirements and distance from compressor. The longer the distance the lower the flow rate with a given size of pipe. Please size to allow flow rates listed in our [Utilities & Size Requirements](#) section of this manual. Liquid Nitrogen Requirements

Gn² Exhaust Requirements

Follow all local code requirements for exhaust setup if any present. When setting up exhaust for chamber be sure to maintain maximum flow. Do not interconnect chamber exhaust as one chamber can then feed into the other causing problems with temperature stability. You may combine the two exhaust tubes of a single chamber but be sure to allow for same cross sectional area to allow for correct flow. For Exhaust size and number please see [Utilities & Size Requirements](#) Section of this manual you may want to install a very low pressure damper be sure that it requires extremely low-pressure delta to open.

We recommend going straight through a roof than doing 180 degree bend back towards the roof maintaining 6' between exits of exhaust and roof service. Also place wire netting at the end to keep birds and animals out.

Make sure to use non-corrosive material as this pipe gets cold and condensation will take place inside and outside. Insulation on the outside of exhaust is recommended to keep moisture off.

If there is obstruction in exhaust this may cause pressure build up in chamber and could cause damage to chamber.

Water Requirements

Water is required for systems with humidity option. Water should be clean and free of debris and mineral deposits. As any contaminants in water will enter chamber and interact with product under test.

We recommend having water tested locally and determine if filters are required.

Drain Requirements

Open drain is recommended for removal of excess condensation on all chambers.

In use of humidity system water drain is mandatory, as water supply to humidity nozzles needs to drain off when nozzles are not in use to prevent freezing during cold cycles.

Oxygen Monitor

Make sure to follow OSHA or local requirements for oxygen monitoring. It is recommended that oxygen monitor be tied to LN2 safety valve shut off so that if low levels occur liquid nitrogen will be shut off and area evacuated until levels are normal

Floor Size and Position

Make sure to make mock up of chamber location and take in account utilities, door openings, and personal safety. For Chamber size see [chamber overall drawings](#).

Utilities & Size Requirements

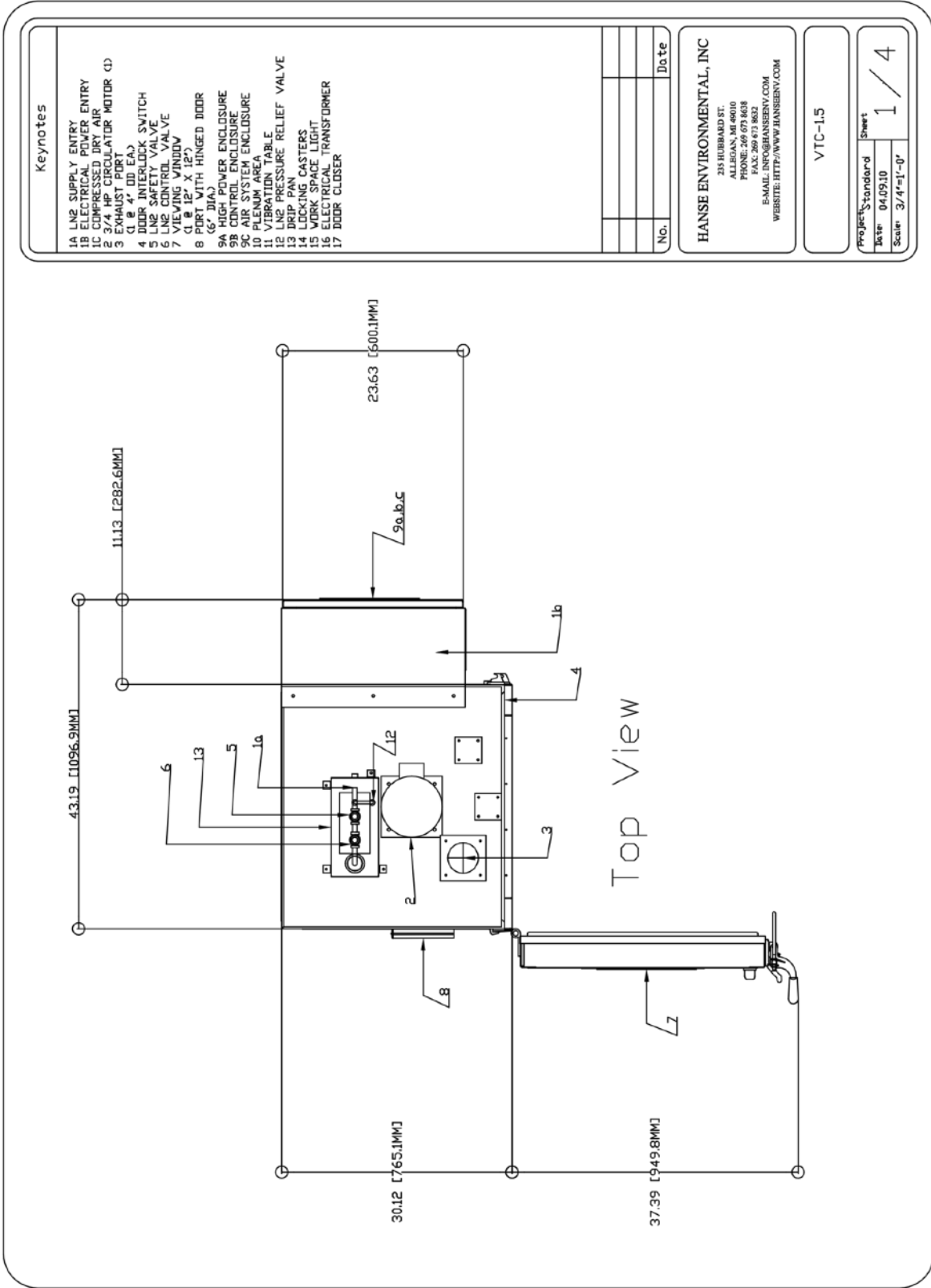
HANSE VTC SPECIFICATIONS 2015 (VIBRATRION THERMAL CHAMBERS)

	VTC-1	VTC-1.5	VTC-4	VTC-6	VTC-9	VTC-9 Eco	VTC-16	VTC-18	VTC-25	VTC-32	VTC-36
Table Size Inch	12x12	20x20	24x24	30x30	36x36	36x36	48x48	36x78	60x60	48x102	70x70
Internal Workspace WxDxH Inch	18x18x18	24x24x23 24x24x34	30x30x36	36x36x36	42x42x38 42x42x50	42x42x38	54x54x38 54x54x50	42x84x36 42x84x50	66x66x38 66x66x50	54x108x38 54x108x50	76x76x38 76x76x50
External Inch WxDxH	28x30x70	40x42x81	60x44x95	66x49x96	72x55x107	72x55x96	84x67x107	72x110x107	96x79x107	84x134x107	106x89x107
Temperature Range	-60° to 175° C	-75° to 175° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C	-100° to 200° C
Change Rate	60° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min	70° C/Min
Max Load lbs.	100	250	700	700	700	700	500	500	500	500	500
Doors	Front	Front	Front and Rear	Front and Rear	Front and rear Bi Parting	Front and Rear	Front and rear Bi Parting	Front and rear Bi Parting	Front and rear Bi Parting	Front and rear Bi Parting	Front and rear Bi Parting
Windows	1	1	2	2	4	2	4	4	4	4	4
Ports	2 x 4"	1 x 6 1 x 1"	2 x 6" 1 x 1"	2 x 6" 1 x 1"	3 x 6" 1 x 1"	2 x 6" 1 x 1"	3 x 6" 1 x 1"	6 x 6" 2 x 1"	3 x 6" 1 x 1"	6 x 6" 2 x 1"	3 x 6" 1 x 1"
Liquid Nitrogen 40-50 psig	3/8" NPT	3/8" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT
Compressed Air***	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar	120 psig 8.3 Bar
Compressed Air Inlet NPT***	1/2"	1/2"	3/4"	3/4"	1"	1"	1"	2 x 1"	1.25" (1.5"*)	2 x 1"	1.25" (1.5"*)
Air Flow SCFM***	15	25	45	55	120	120	100 (200*)	120 (240*)	150 (300*)	200 (400)	225 (450*)
FLA 480V 3 PH	30**	50	60	125	125	125	125	150	175	250	245
FLA 380V 3 PH	20	65	75	160	160	160	160	190	220	315	310
Weight lbs.	650	1,000	1,900	2,500	4,000	3,500	4,250	7,000	6,000	8,500	7,000

Note:

- * Ultra High Requires 1/4" added to Supply Size
 - ** 240V 3 Phase
 - *** TC models Compressed air Inlet is 1/2" NPT 100 PSI 10 SCFM
- All Specifications subject to change.

VTC-1.5 Drawings



Top View

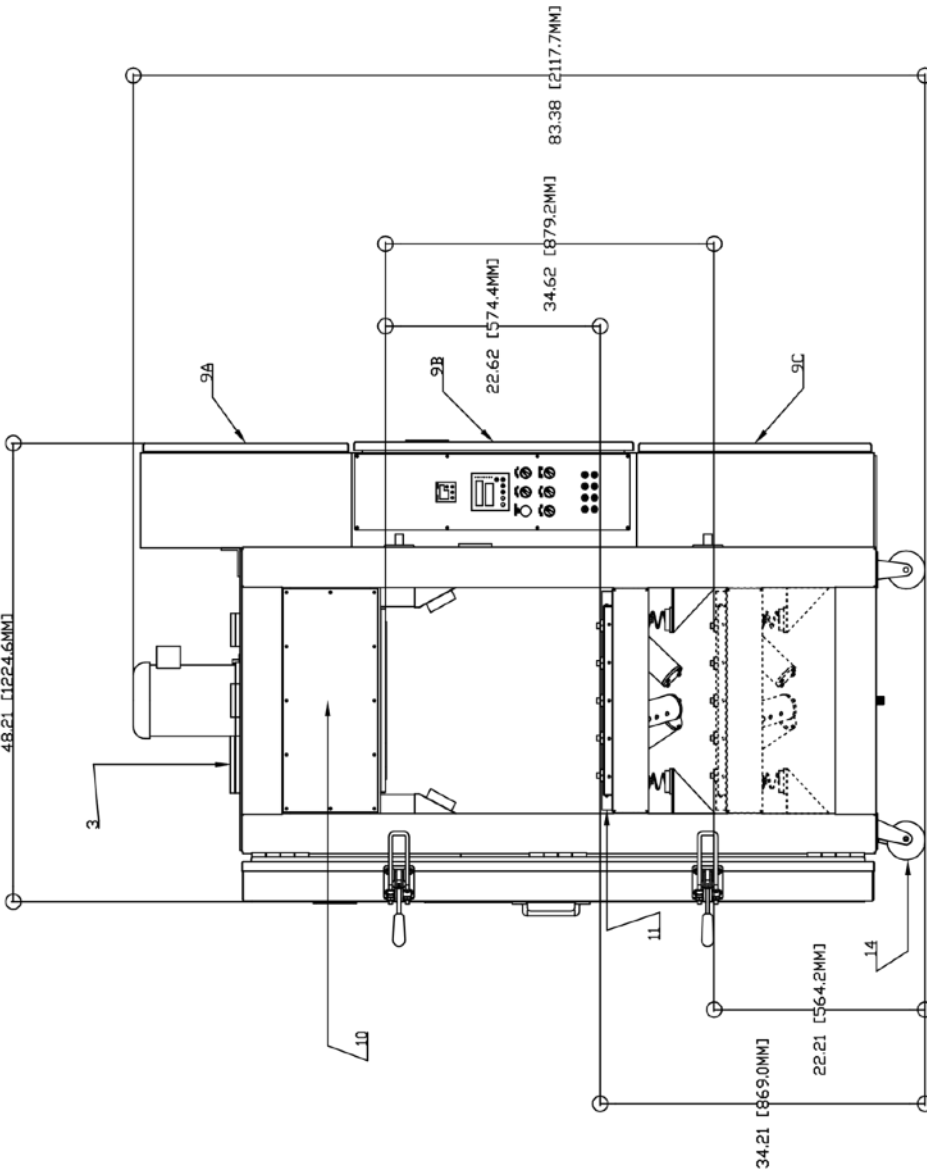
- Keynotes**
- 1A LN2 SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY
 - 1C COMPRESSED DRY AIR
 - 2 3/4 HP CIRCULATOR MOTOR (1)
 - 3 EXHAUST PORT (1 @ 4" O.D. EA.)
 - 4 DOOR INTERLOCK SWITCH
 - 5 SAFETY VALVE
 - 6 SAFETY VALVE
 - 7 VIEWING WINDOW (1 @ 12" X 12")
 - 8 PORT WITH HINGED DOOR (6" DIA.)
 - 9A HIGH POWER ENCLOSURE
 - 9B CONTROL ENCLOSURE
 - 9C AIR SYSTEM ENCLOSURE
 - 10 FLENUM AREA
 - 11 PRESSURE RELIEF VALVE
 - 12 DRIP PAN
 - 13 LOCKING CASTERS
 - 14 WORK SPACE LIGHT
 - 15 ELECTRICAL TRANSFORMER
 - 17 DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269.679.8638
 FAX: 269.679.8639
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-1.5

Project	Standard	Sheet
Master	04.09.10	1 / 4
Scale	3/4"=1'-0"	



Front
(Door Open)

Keynotes

- 1A LNB SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY
- 2 COMPRESSED DRY AIR
- 3 EXHAUST PORT (1 @ 4" OD EA)
- 4 DOOR INTERLOCK SWITCH
- 5 LNB SAFETY VALVE
- 6 LNB CONTROL VALVE
- 7 LNB SAFETY WINDOW (1 @ 12" X 12")
- 8 PORT WITH HINGED DOOR (6" DIA)
- 9A HIGH POWER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C AIR SYSTEM ENCLOSURE
- 10 PLENUM AREA
- 11 VIBRATION TABLE
- 12 PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 WORK SPACE LIGHT
- 16 ELECTRICAL TRANSFORMER
- 17 DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 TEL: 616-733-1438
 FAX: 616-733-1435
 E-MAIL: INFO@HANSENV.COM
 WEBSITE: HTTP://WWW.HANSENV.COM

VTC-15

Project Standard	Sheet
Date 04.09.10	2 / 4
Scale 3/4"=1'-0"	

Keynotes

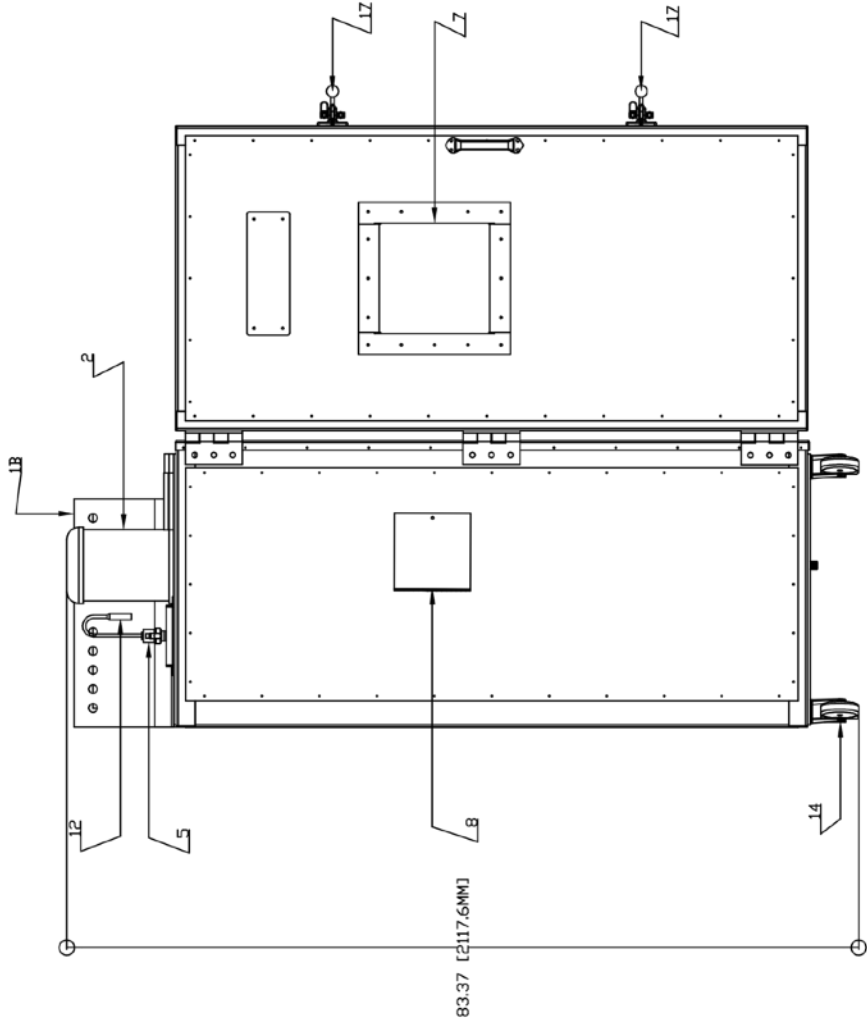
- 1A LN2 SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY
- 1C COMPRESSED DRY AIR
- 2 3/4 HP CIRCULATOR MOTOR (1)
- 3 EXHAUST PORT
- 4 DOOR INTERLOCK SWITCH
- 5 SAFETY VALVE
- 6 LN2 CONTROL VALVE
- 7 VIEWING WINDOW
- 8 PORT WITH HINGED DOOR
- 9A HIGH POWER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C AIR SYSTEM ENCLOSURE
- 10 PERMANENT AIR
- 11 VENTING TABLE
- 12 LN2 PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 WORK SPACE LIGHT
- 16 ELECTRICAL TRANSFORMER
- 17 DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HURBARD ST.
 ALBANY, NY 12206
 PHONE: 260.673.8638
 FAX: 260.673.8632
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-15

Project: Standard Sheet
 Date: 04.09.10
 Scale: 3/4"=1'-0" 3/4



Left View

Keynotes

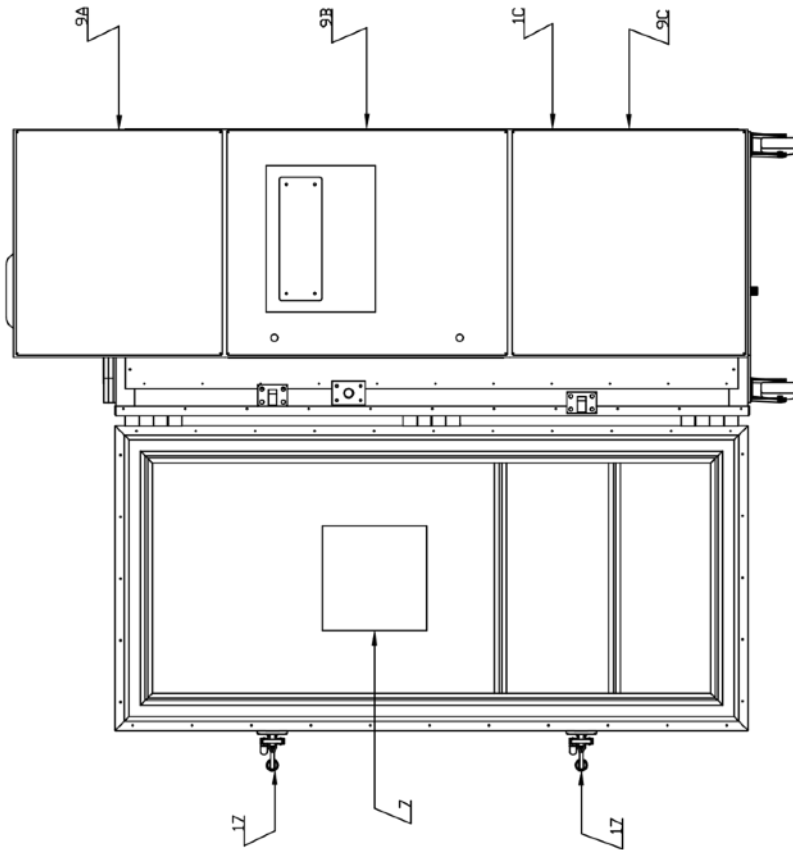
- 1A LN2 SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY
- 2 COMPRESSED DRY AIR
- 3 EXHAUST PORT (1 @ 4" OD EA.)
- 4 DOOR INTERLOCK SWITCH
- 5 LN2 SAFETY VALVE
- 6 LN2 CONTROL VALVE
- 7 VESSEL WINDOW (1 @ 12" X 12")
- 8 PORT WITH HINGED DOOR (6" DIA.)
- 9A HIGH POWER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C AIR SYSTEM ENCLOSURE
- 10 PLENUM AREA
- 11 BRACKET TABLE
- 12 LN2 PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 WORK SPACE LIGHT
- 16 ELECTRICAL TRANSFORMER
- 17 DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLIQUAN, MI 48010
 TEL: 248.299.8800
 FAX: 248.299.8803
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

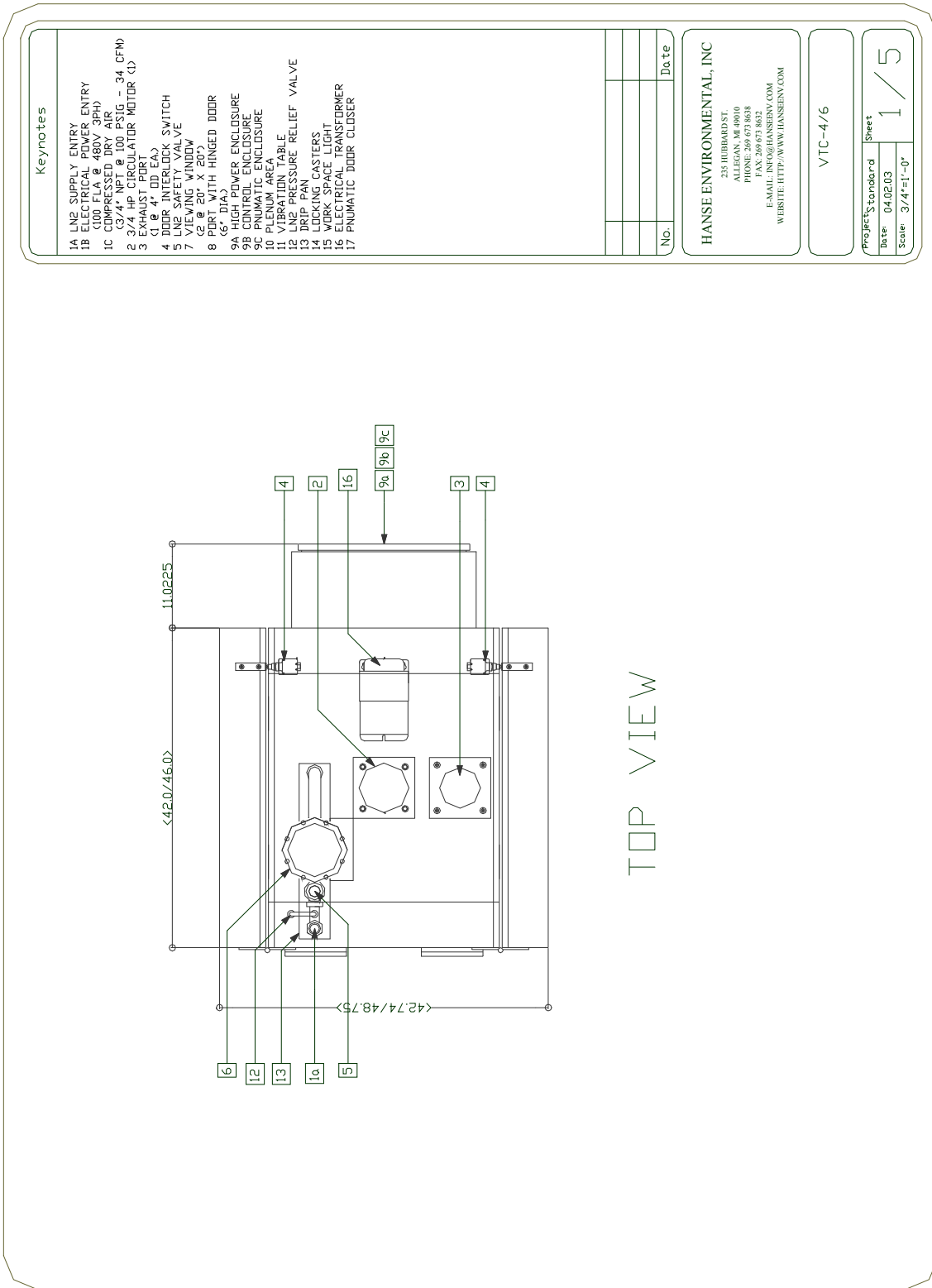
VTC-15

PROJECT: Standard	SHEET
DATE: 04.09.10	4 / 4
SCALE: 3/4"=1'-0"	



Right View

VTC-4/6 Drawings



Keynotes

- 1A LINE SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY (60V / 1PH)
- 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 34 CFM)
- 2 3/4" HP CIRCULATOR MOTOR (1)
- 3 EXHAUST PORT (1 @ 4" DD EA)
- 4 DOOR INTERLOCK SWITCH
- 5 LINE SAFETY VALVE
- 6 PNEUMATIC MOTOR (3 @ 20" X 20")
- 8 PORT WITH HINGED DOOR (6" DIA)
- 9A HIGH POWER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C PNEUMATIC ENCLOSURE
- 10 PLENUM AREA
- 11 LINE INTERLOCKABLE
- 12 LINE PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 WORK SPACE LIGHT
- 16 ELECTRICAL TRANSFORMER
- 17 PNEUMATIC DOOR CLOSER

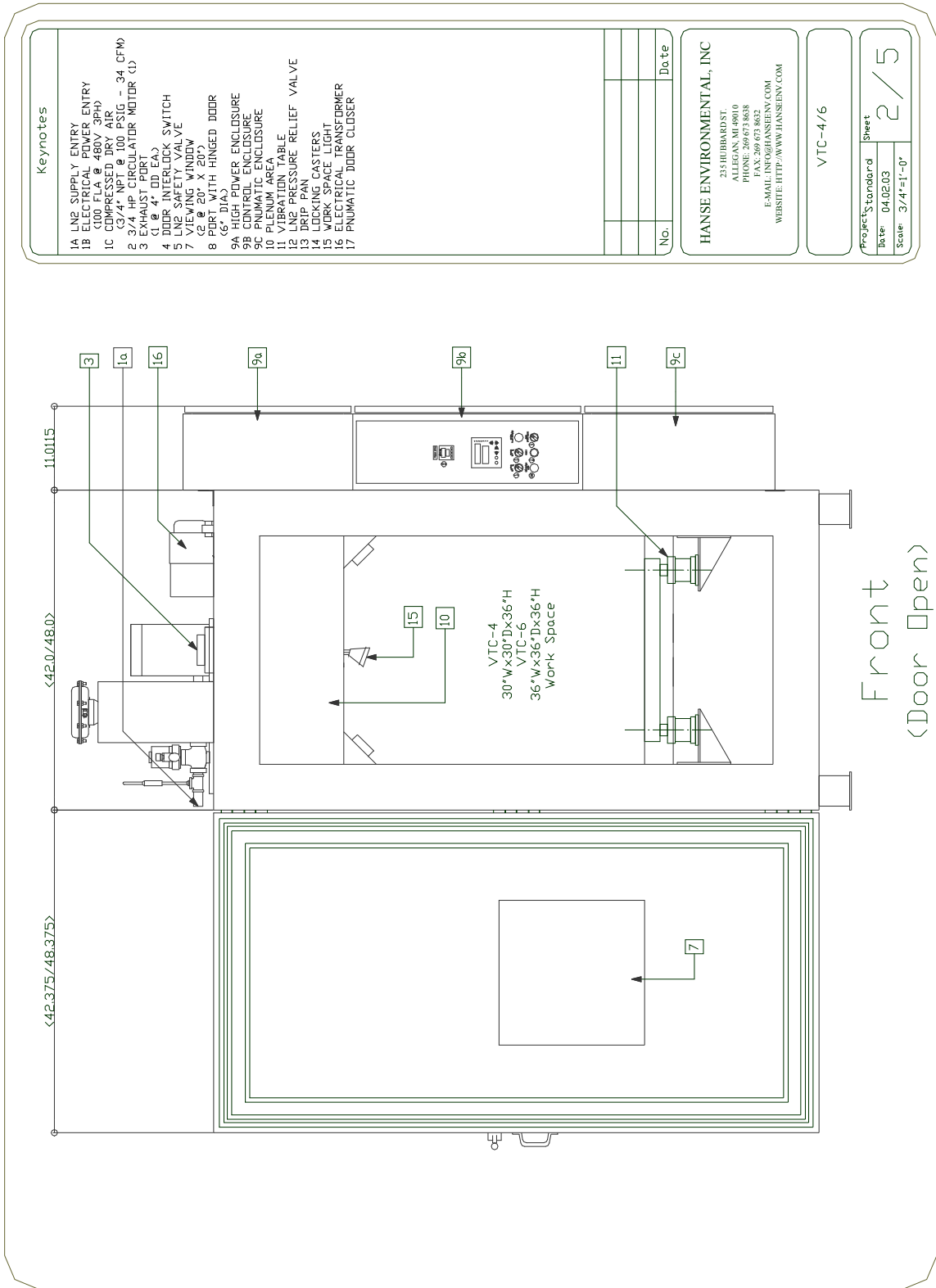
NO.	Date

HANSE ENVIRONMENTAL, INC
 233 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269.673.8638
 FAX: 269.673.8638
 E-MAIL: INFO@HANSENV.COM
 WEBSITE: HTTP://WWW.HANSENV.COM

VTC-4/6

Project/Standard	Sheet
Date: 04.02.03	1 / 5
Scale: 3/4"=1'-0"	

Top View



Keynotes

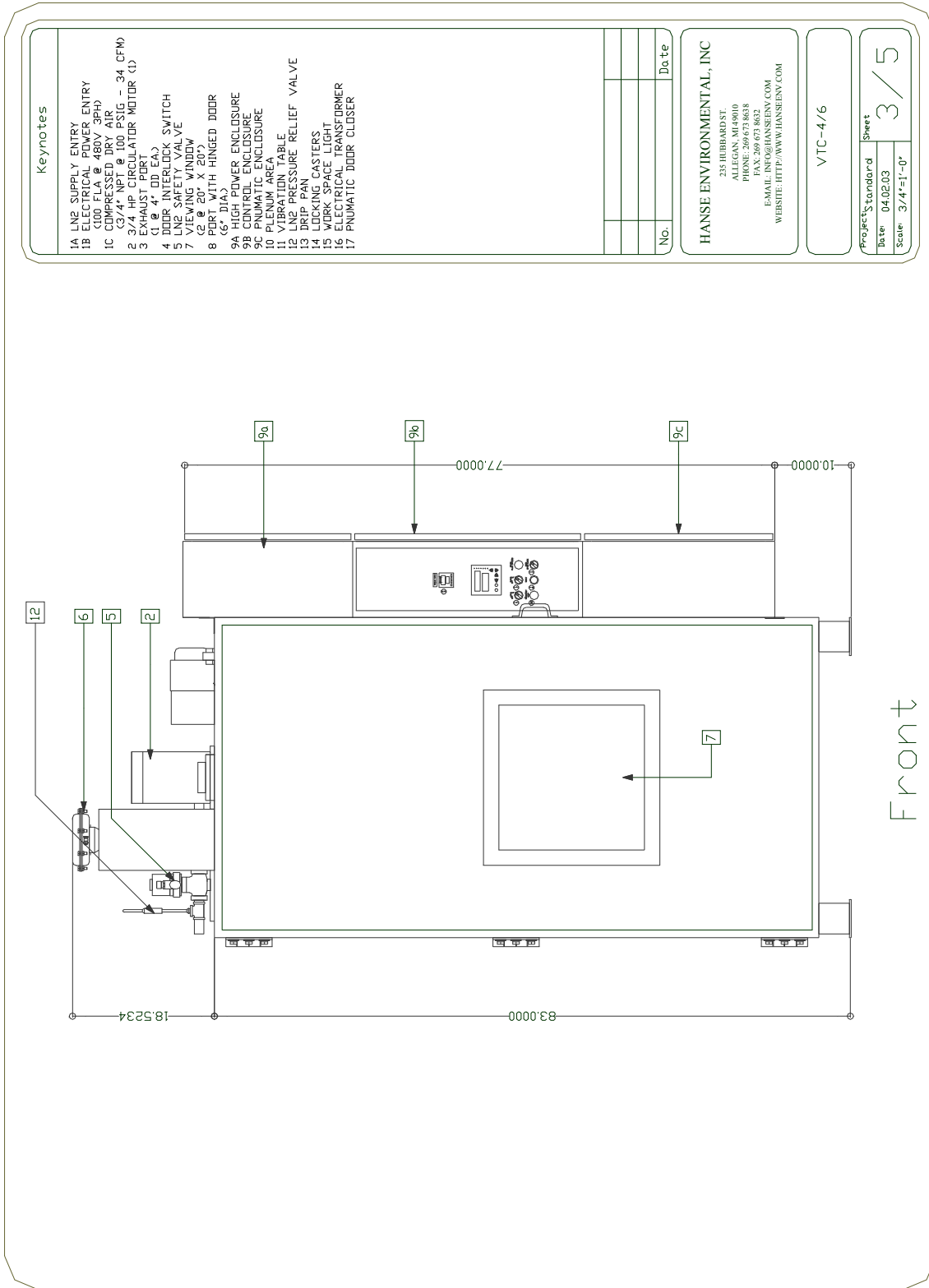
1A LN2 SUPPLY ENTRY
 1B ELECTRICAL POWER ENTRY
 (100 FLA @ 480V 3PH)
 1C COMPRESSED DRY AIR
 (3/4" NPT @ 100 PSIG - 34 CFM)
 2 3/4" HPC CIRCULATOR MOTOR (1)
 3 (1 @ 4" ID EA)
 4 DOOR INTERLOCK SWITCH
 5 LN2 SAFETY VALVE
 7 VIEWING WINDOW
 (2 @ 20" X 20")
 8 PORT WITH HINGED DOOR
 (6" DIA)
 9A DIAPHRAGM ENCLASURE
 9B CONTROL ENCLASURE
 9C PNEUMATIC ENCLASURE
 10 PLENUM AREA
 11 VIBRATION TABLE
 12 LN2 PRESSURE RELIEF VALVE
 13 DRIP PAN
 14 LOCKING CASTERS
 15 LOCKING CASTERS
 16 ELECTRICAL TRANSFORMER
 17 PNEUMATIC DOOR CLOSER

No.	Date

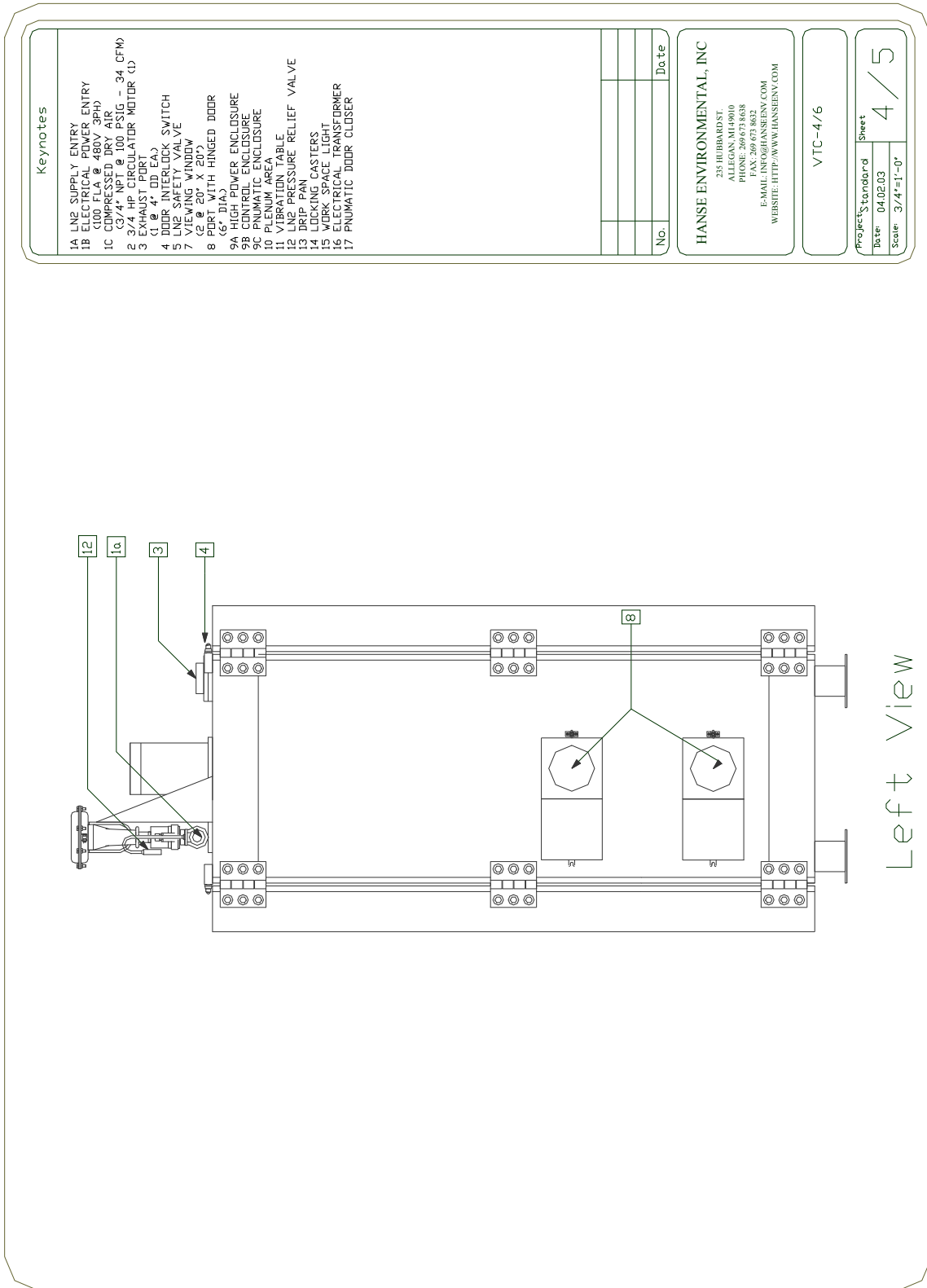
HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 TEL: 269.671.1500
 FAX: 269.671.8632
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-4/6

Project: Standard	Sheet
Date: 04.02.03	2 / 5
Scale: 3/4"=1'-0"	



Front Door View



Left View

Keynotes

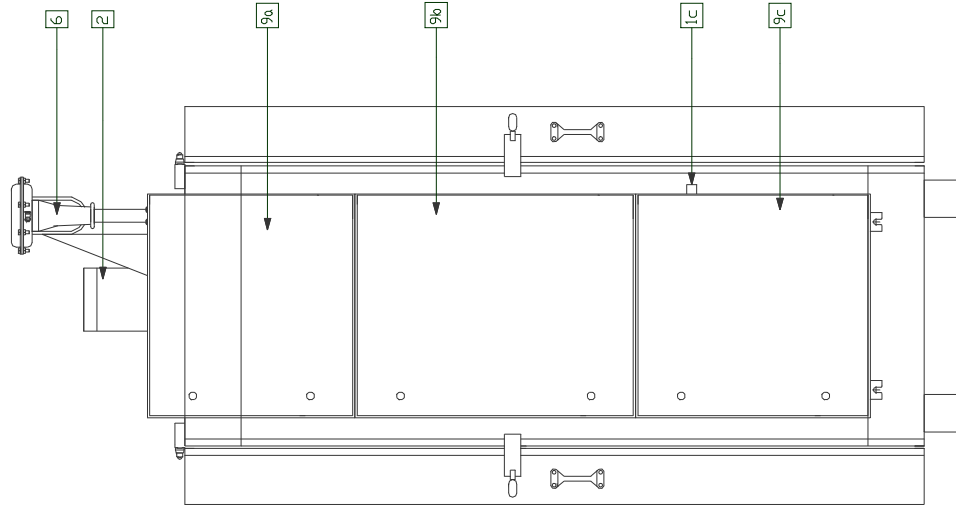
- 1A LN2 SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY (100 FLA @ 480V 3PH)
- 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG -34 CFM)
- 2 3/4" HP CIRCULATOR MOTOR (D (1/4" DIA))
- 3 (1/4" DIA)
- 4 DOOR INTERLOCK SWITCH (1/4" DIA)
- 5 LN2 SAFETY VALVE
- 7 VIEWING WINDOW (2 @ 20" X 20")
- 8 PORT WITH HINGED DOOR (6" DIA)
- 9A LOWER ENCLOSURE
- 9B UPPER ENCLOSURE
- 9C PNEUMATIC ENCLOSURE
- 10 PLENUM AREA
- 11 VIBRATION TABLE
- 12 LN2 PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 VIBRATION ISOLATOR
- 16 ELECTRICAL TRANSFORMER
- 17 PNEUMATIC DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 TEL: 616-835-8288
 FAX: 616-835-8623
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-4/6

Project/Standard	Sheet
Date: 04.02.03	4 / 5
Scale: 3/4"=1'-0"	



Right View

Keynotes

- 1A LN2 SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY (100 FLA @ 480V 3PH)
- 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 34 CFM)
- 2 3/4" NPT @ 100 PSIG - 34 CFM
- 3 3/4" NPT @ 100 PSIG - 34 CFM
- 4 DOOR INTERLOCK SWITCH
- 5 LN2 SAFETY VALVE
- 7 VIEWING WINDOW (2 @ 20" X 20")
- 8 PORT WITH HINGED DOOR (6 DIA)
- 9A DOOR LOCKER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C PNEUMATIC ENCLOSURE
- 10 PLENUM AREA
- 11 VIBRATION TABLE
- 12 LN2 PRESSURE RELIEF VALVE
- 13 DRIP PAN
- 14 LOCKING CASTERS
- 15 VIBRATION ISOLATION MOUNT
- 16 ELECTRICAL TRANSFORMER
- 17 PNEUMATIC DOOR CLOSER

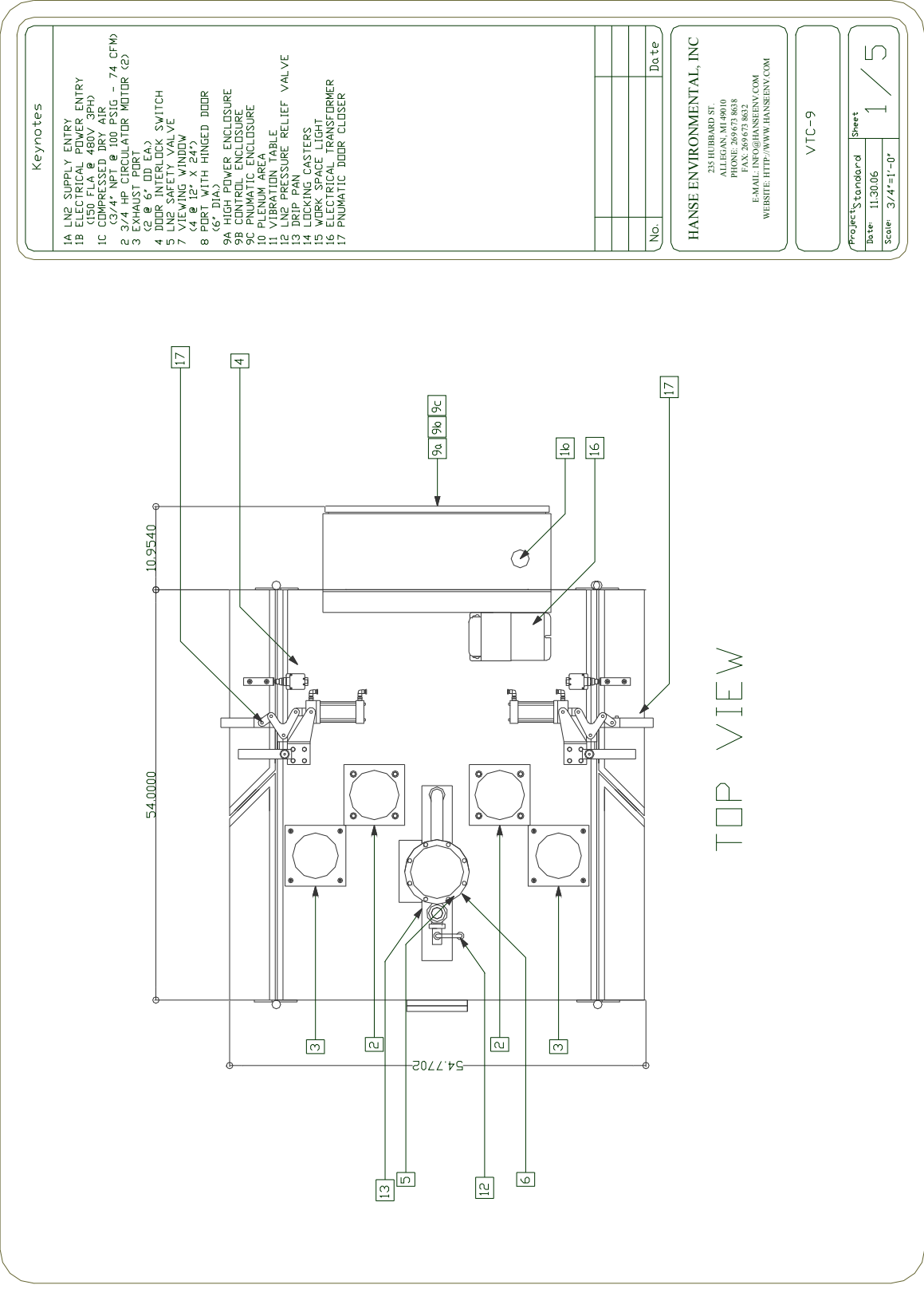
No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49001
 TEL: 269-673-8632
 FAX: 269-673-8632
 E-MAIL: INFO@HANSENVY.COM
 WEBSITE: HTTP://WWW.HANSENVY.COM

VTC-4/6

Project/Standard	Sheet
Date 04.02.03	5/5
Scale 3/4"=1'-0"	

VTC-9



- Keynotes**
- 1A LNG SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (150 FLA @ 480V 3PH)
 - 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 74 CFM)
 - 2 3/4 HP CIRCULATOR MOTOR (2)
 - 3 EXHAUST PORT (2 @ 6" DD EA)
 - 4 DOOR INTERLOCK SWITCH
 - 5 LINE VENT VALVE
 - 6 LINE VENT VALVE (12" X 24")
 - 7 PORT WITH HINGED DOOR (6" DIA)
 - 8 HIGH POWER ENCLOSURE
 - 9A CONTROL ENCLOSURE
 - 9B PNUMATIC ENCLOSURE
 - 9C PLENUM AREA
 - 10 VIBRATION TABLE
 - 11 PRESSURE RELIEF VALVE
 - 12 LOCKING CASTERS
 - 13 WORK SPACE LIGHT
 - 14 ELECTRICAL TRANSFORMER
 - 15 PNUMATIC DOOR CLOSER

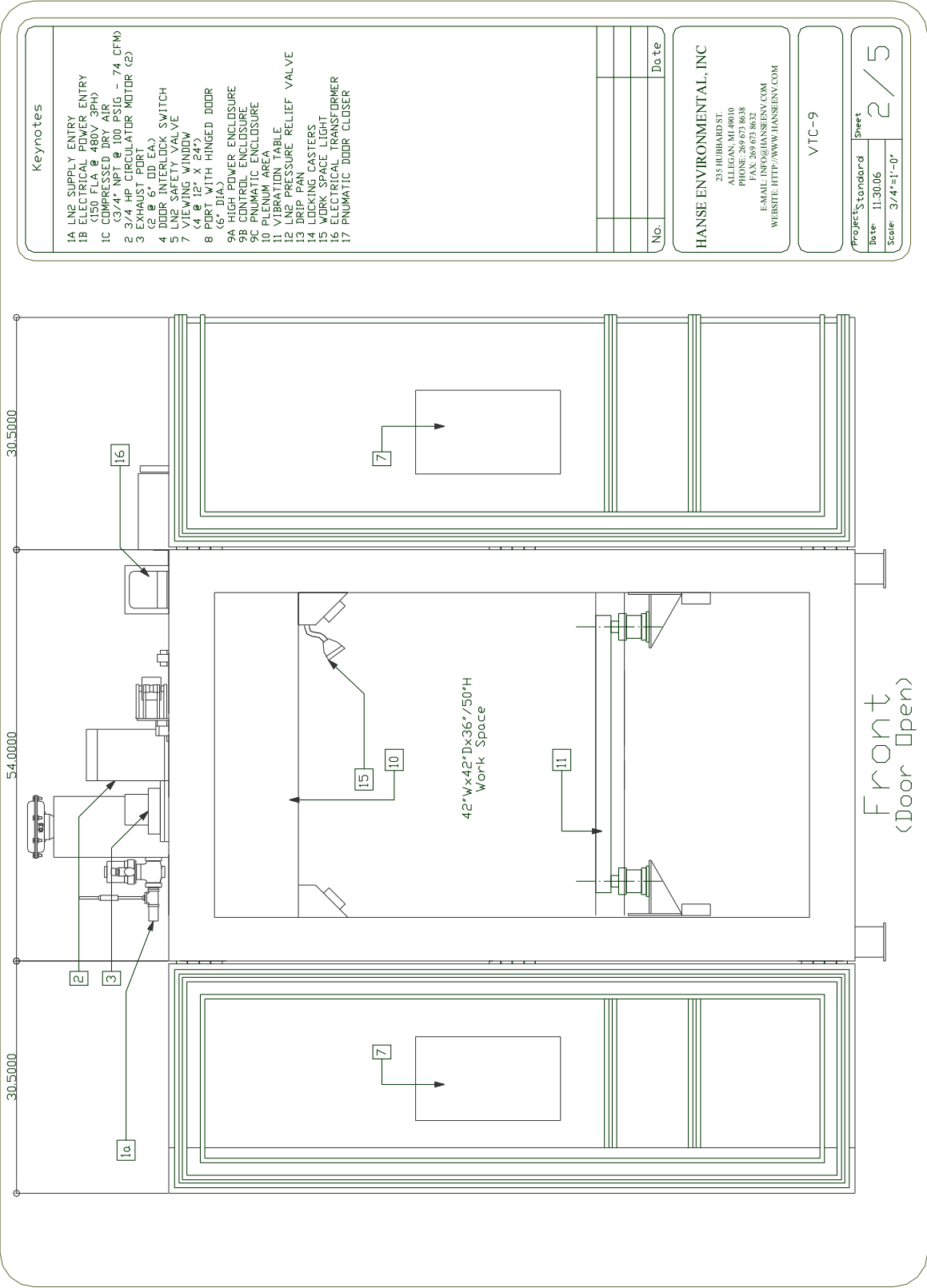
No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269.673.8638
 FAX: 269.673.8635
 E-MAIL: SALES@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-9

Project's Standard	Sheet
Date: 11.30.06	1 / 5
Scale: 3/4"=1'-0"	

TOP VIEW



- Keynotes**
- 1A LNE SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (100 FLA @ 480V/3PH)
 - 1C 3/4\"/>
 - 2 3/4\"/>
 - 3 EXHAUST PORT (2 @ 6\"/>
 - 4 DOOR INTERLOCK SWITCH
 - 5 LNE SAFETY VALVE
 - 7 VIEWING WINDOW
 - 8 6\"/>
 - 9A HIGH POWER ENCLOSURE
 - 9B CONTROL ENCLOSURE
 - 9C PNUMATIC ENCLOSURE
 - 10 PLENUM AREA
 - 11 VIBRATION TABLE
 - 12 LNE PRESSURE RELIEF VALVE
 - 13 DRIP PAN
 - 14 LOCKING CASTERS
 - 15 LOCKING CASTERS
 - 16 ELECTRICAL TRANSFORMER
 - 17 PNUMATIC DOOR CLOSER

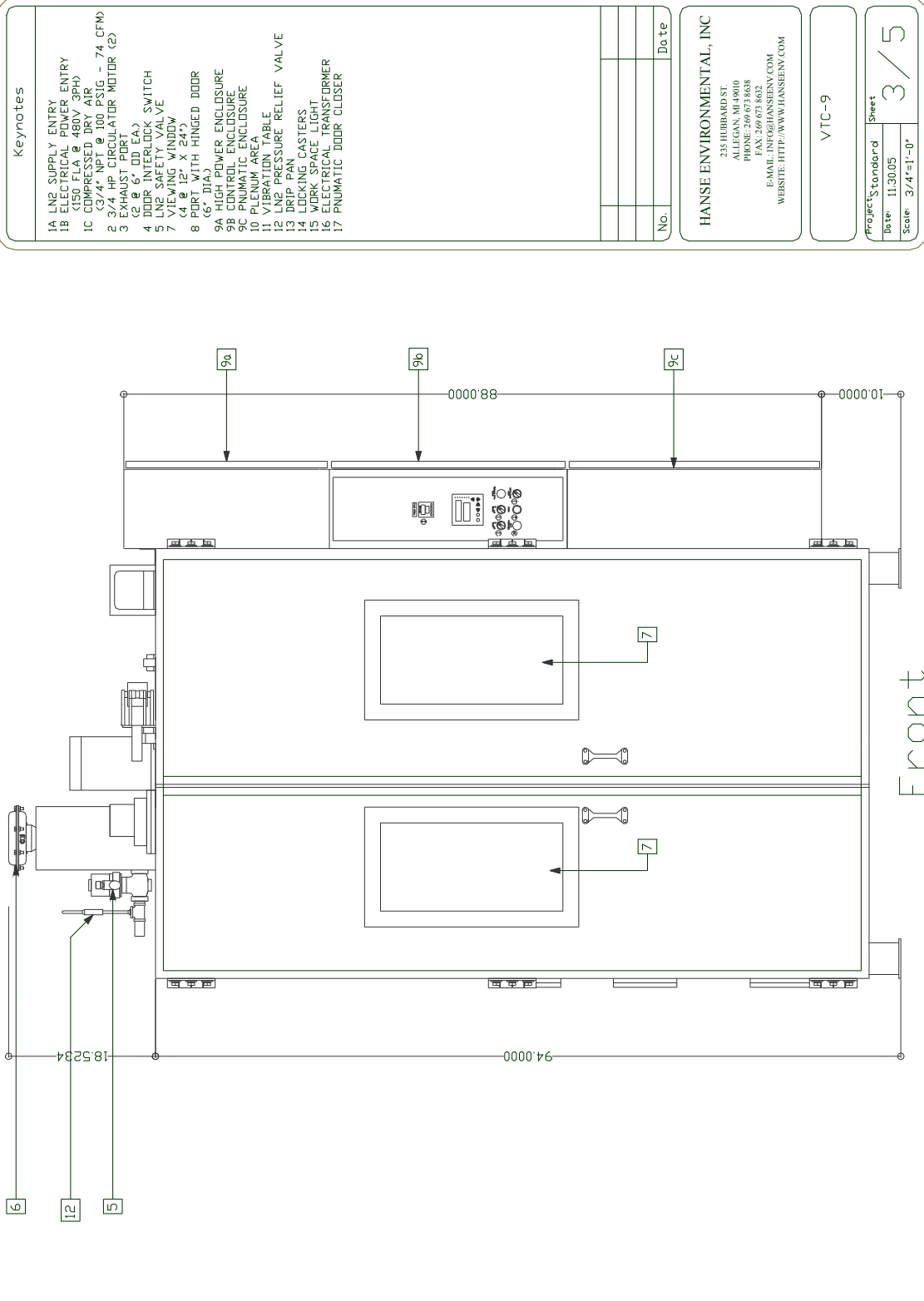
No.	Date

HANSE ENVIRONMENTAL, INC
 215 HUBBARD ST
 ALLEGAN, MI 49010
 PHONE: 269.673.8638
 FAX: 269.673.8632
 E-MAIL: INFO@HANSENV.COM
 WEBSITE: HTTP://WWW.HANSENV.COM

VTC-9

Project: Standard	Sheet
Date: 11.30.06	2 / 5
Scale: 3/4"=1'-0"	

Front Doors Open



Keynotes

- 1A LINE SUPPLY ENTRY
- 1B ELECTRICAL PANEL
- 1C COMPRESSED DRY AIR
- 2 3/4" HP CIRCULATOR MOTOR (2)
- 3 EXHAUST PORT
- 4 DOOR INTERLOCK SWITCH
- 5 LINE SAFETY VALVE
- 6 VIEWING WINDOW
- 7 PORT WITH HINGED DOOR (6" DIA.)
- 8 HIGH POWER ENCLOSURE
- 9 CONTROL ENCLOSURE
- 9A PNUMATIC ENCLOSURE
- 10 PLENUM AREA
- 11 VIBRATION TABLE
- 12 LINE PRESSURE RELIEF VALVE
- 13 LOCKING CASTERS
- 14 WORK SPACE LIGHT
- 15 ELECTRICAL TRANSFORMER
- 16 PNUMATIC DOOR CLOSER

No.	Date

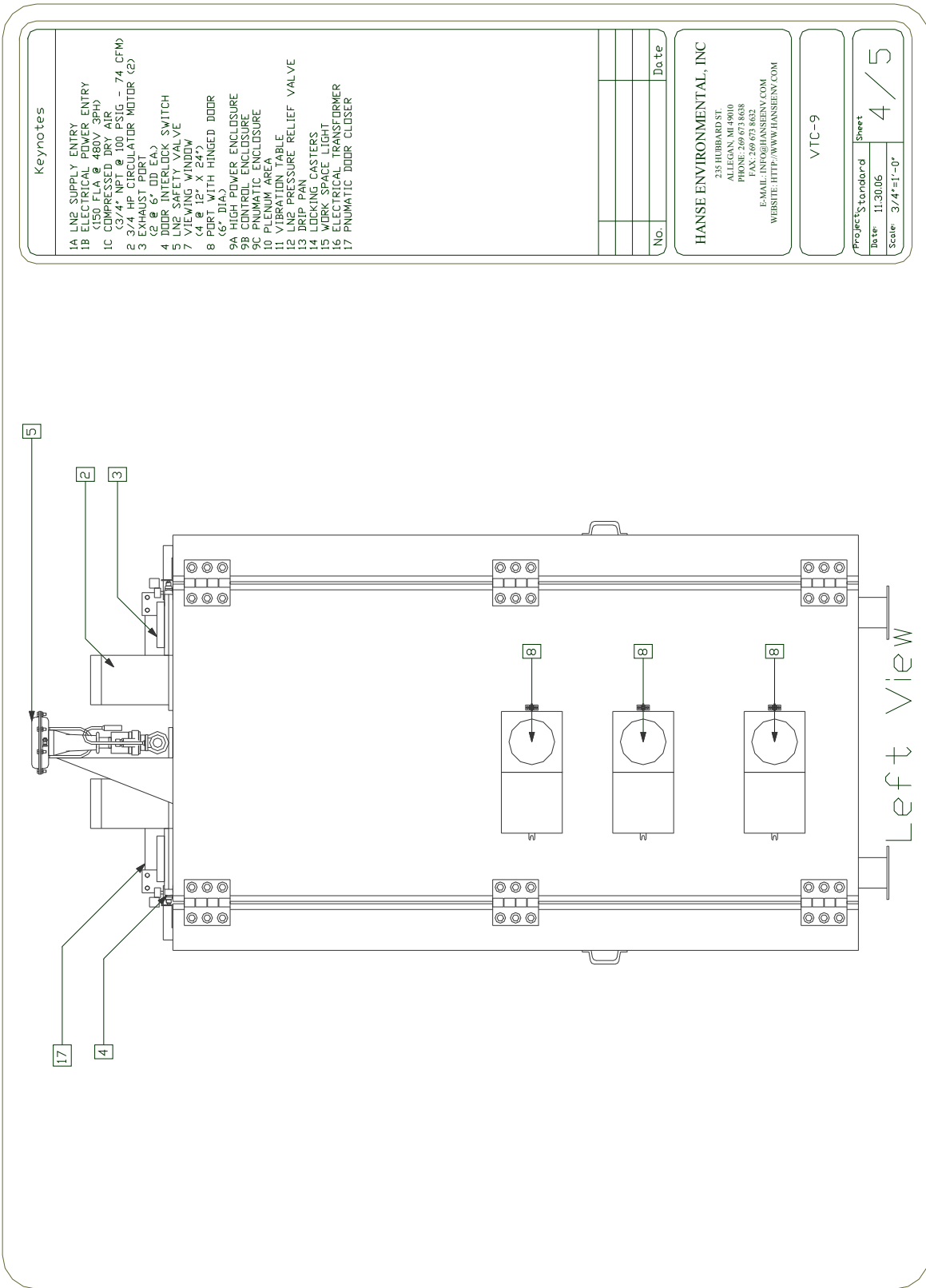
HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269 673 8638
 FAX: 269 673 8632
 E-MAIL: INFO@HANSENV.COM
 WEBSITE: HTTP://WWW.HANSENV.COM

VTC-9

Project: Standard Sheet
 Date: 11/30/05
 Scale: 3/4"=1'-0"

3 / 5

Front Doors Closed



- Keynotes**
- 1A LN2 SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (3/4" DIA. 480V 3PH)
 - 1C COMPRESSED AIR ENTRY (3/4" NPT @ 100 PSIG - 74 CFM)
 - 2 3/4" HP. CIRCULATOR MOTOR (2)
 - 3 EXHAUST PORT (2 @ 6" OD EA.)
 - 4 DOOR INTERLOCK SWITCH
 - 5 LINE SAFETY VALVE
 - 6 VIEWING WINDOW (4 @ 12" X 24")
 - 7 DOOR WITH HINGED DOOR (6" DIA.)
 - 8 HIGH POWER ENCLOSURE
 - 9A CONTROL ENCLOSURE
 - 9B PNUMATIC ENCLOSURE
 - 10 PLENUM AREA
 - 11 VIBRATION TABLE
 - 12 LN2 PRESSURE RELIEF VALVE
 - 13 DRIP PAN CASTERS
 - 14 LOCKING SCREW
 - 15 ELECTRICAL TRANSFORMER
 - 17 PNUMATIC DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269 673 8638
 FAX: 269 673 8632
 E-MAIL: INFO@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

VTC-9

PROJECT: Standard
 Date: 11/30/06
 Scale: 3/4"=1'-0"
 Sheet: 4 / 5

Keynotes

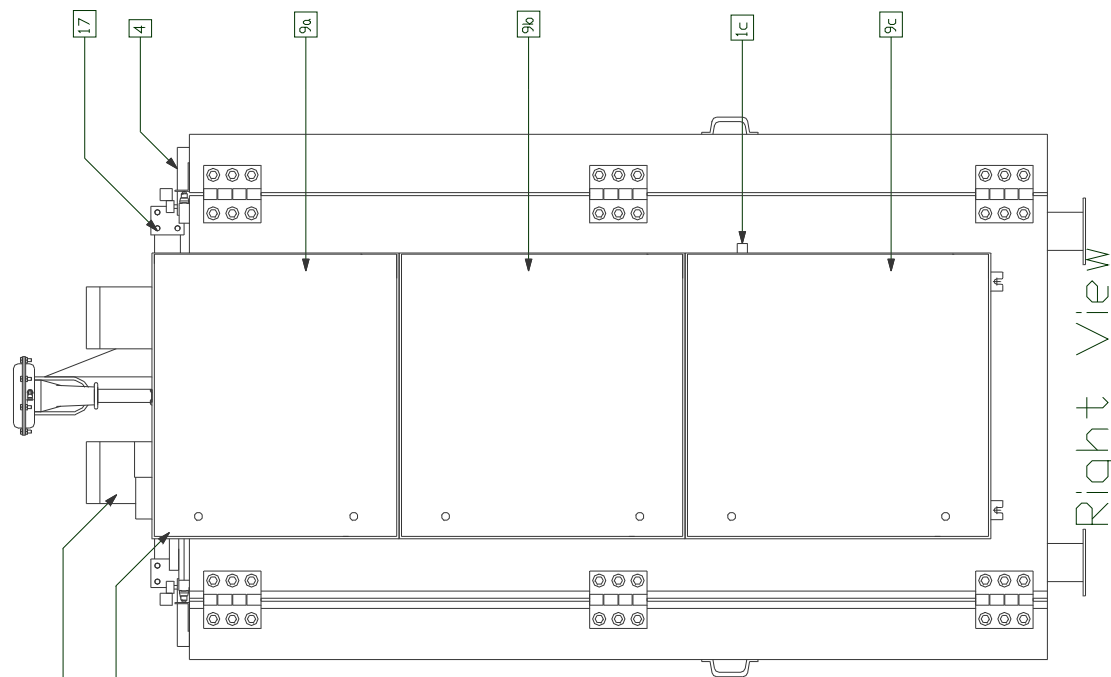
- 1A LINE SUPPLY ENTRY
- 1B ELECTRICAL POWER ENTRY
- 1C COMPRESSED AIR ENTRY
- 2 3/4" NPT @ 100 PSIG - 74 CFM
- 3 EXHAUST PORT
- 4 2 @ 6" OD EA.
- 5 DOOR INTERLOCK SWITCH
- 6 LINE SAFETY VALVE
- 7 VIEWING WINDOW
- 8 PORT WITH HINGED DOOR (6" DIA.)
- 9A HIGH POWER ENCLOSURE
- 9B CONTROL ENCLOSURE
- 9C PNEUMATIC ENCLOSURE
- 10 PLENUM AREA
- 11 VIBRATION TABLE
- 12 LINE PRESSURE RELIEF VALVE
- 13 WORKING SPACE
- 14 JACKING CASTERS
- 15 WORK SPACE LIGHT
- 16 ELECTRICAL TRANSFORMER
- 17 PNEUMATIC DOOR CLOSER

No.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269 673 8638
 FAX: 269 673 8632
 E-MAIL: INFO@HANSENV.COM
 WEBSITE: HTTP://WWW.HANSENV.COM

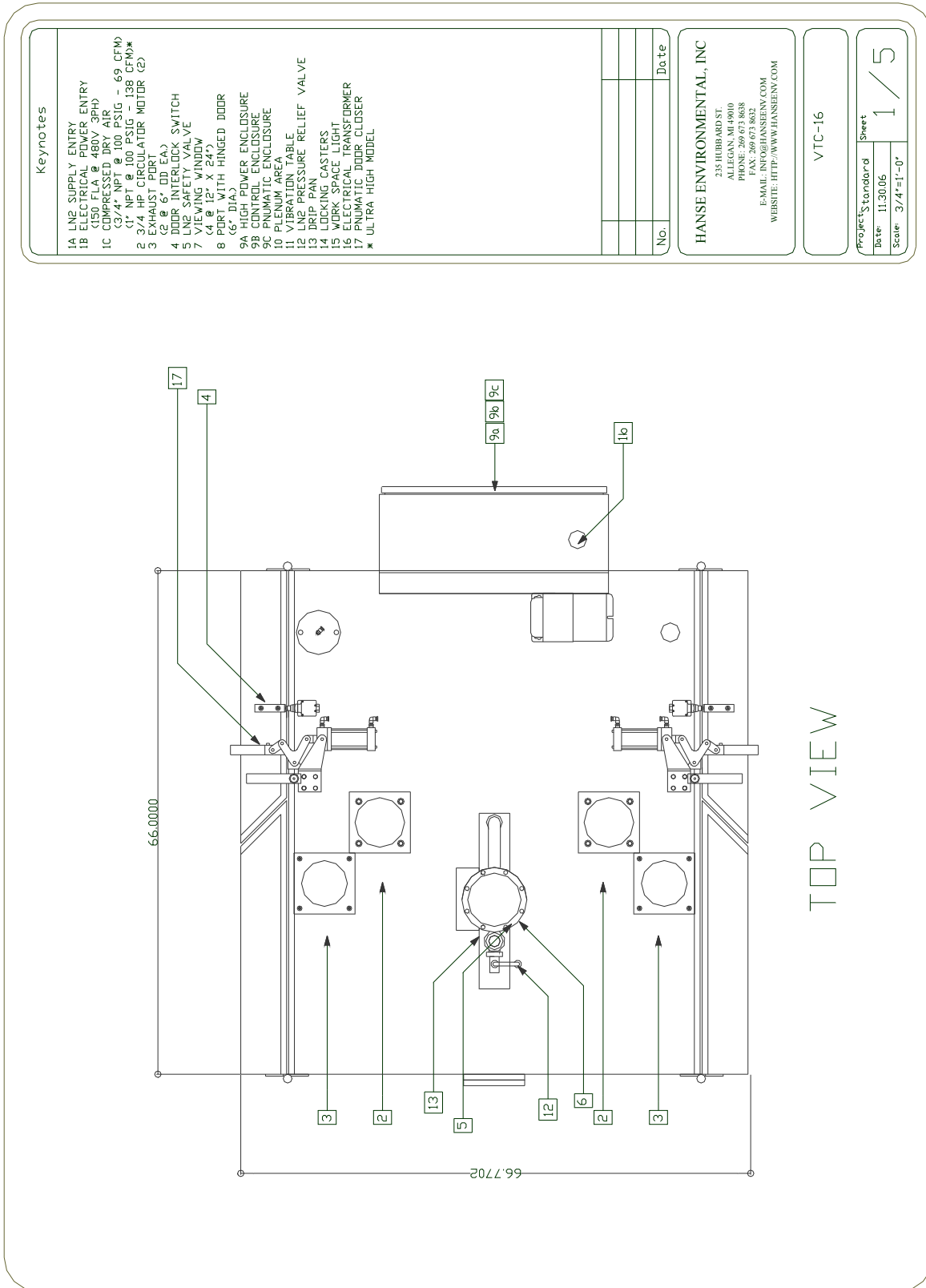
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PROJECT: Standard	SHEET
Date: 11/30/06	5 / 5
Scale: 3/4"=1'-0"	



Right View

VTC-16



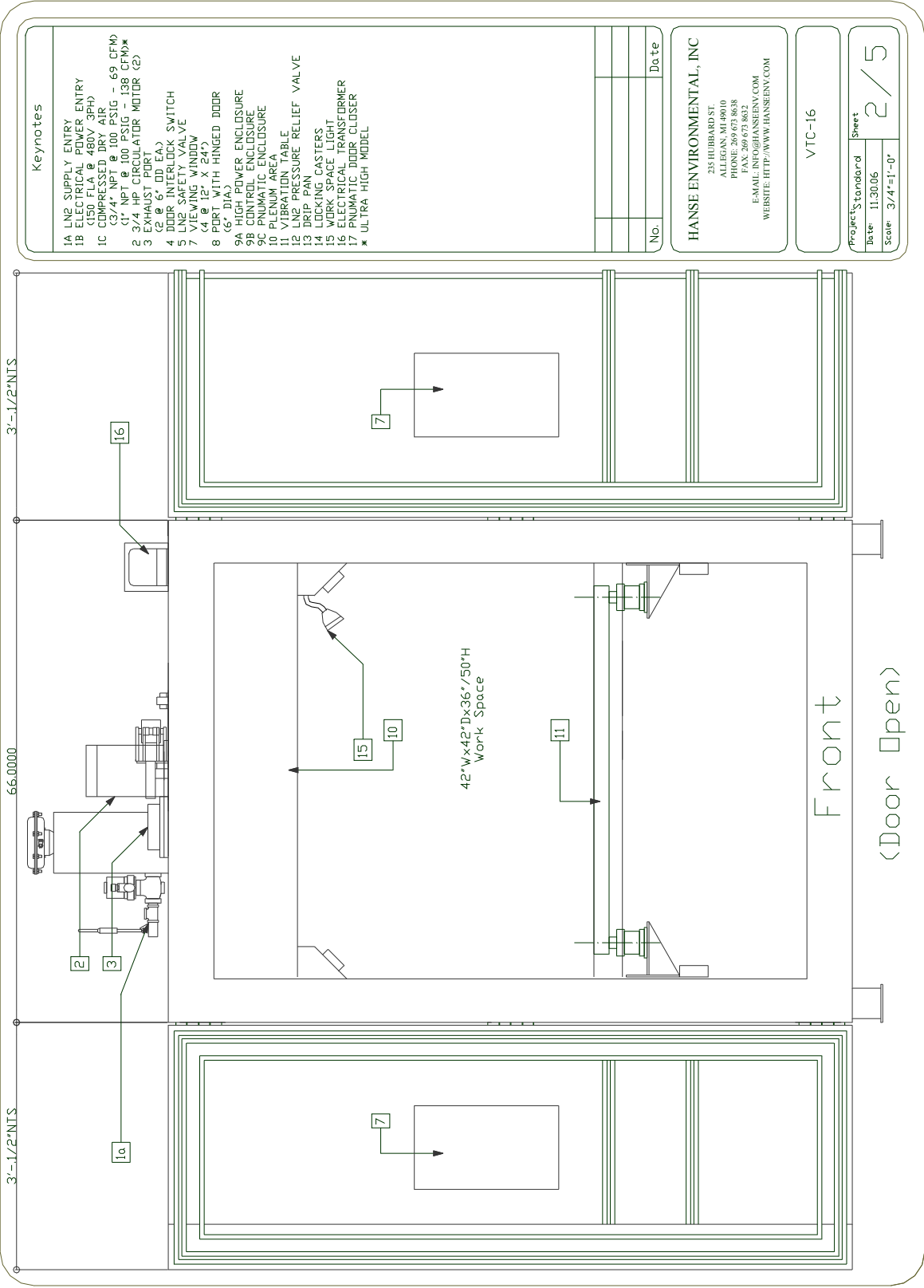
- Keynotes**
- 1A IN2 SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (150 FLA @ 480V 3PH)
 - 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 69 CFM) (1" NPT @ 100 PSIG - 138 CFM)*
 - 2 3/4 HP CIRCULATOR MOTDR (2)
 - 3 EXHAUST PORT (2 @ 6" IOD EA)
 - 4 DOOR INTERLOCK SWITCH
 - 5 DOOR INTERLOCK VALVE
 - 6 VIEWING WINDOW (4 @ 12" X 24")
 - 8 PORT WITH HINGED DOOR (6" DIA)
 - 9A HIGH POWER ENCLOSURE
 - 9B CONTROL ENCLOSURE
 - 9C PNUMATIC ENCLOSURE
 - 10 PLENUM AREA
 - 11 AIR FILTER ASSEMBLY
 - 12 AIR PRESSURE RELIEF VALVE
 - 13 DRIP PAN
 - 14 LOCKING CASTERS
 - 15 WORK SPACE LIGHT
 - 16 ELECTRICAL TRANSFORMER
 - 17 PNUMATIC DOOR CLOSER
 - * ULTRA HIGH MODEL

NO.	Date

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST
 ALLEGAN, MI 49010
 PHONE: 269 673 8638
 FAX: 269 673 8632
 E-MAIL: SALES@HANSEENV.COM
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Project Standard	SHEET
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Scale: 3/4"=1'-0"	

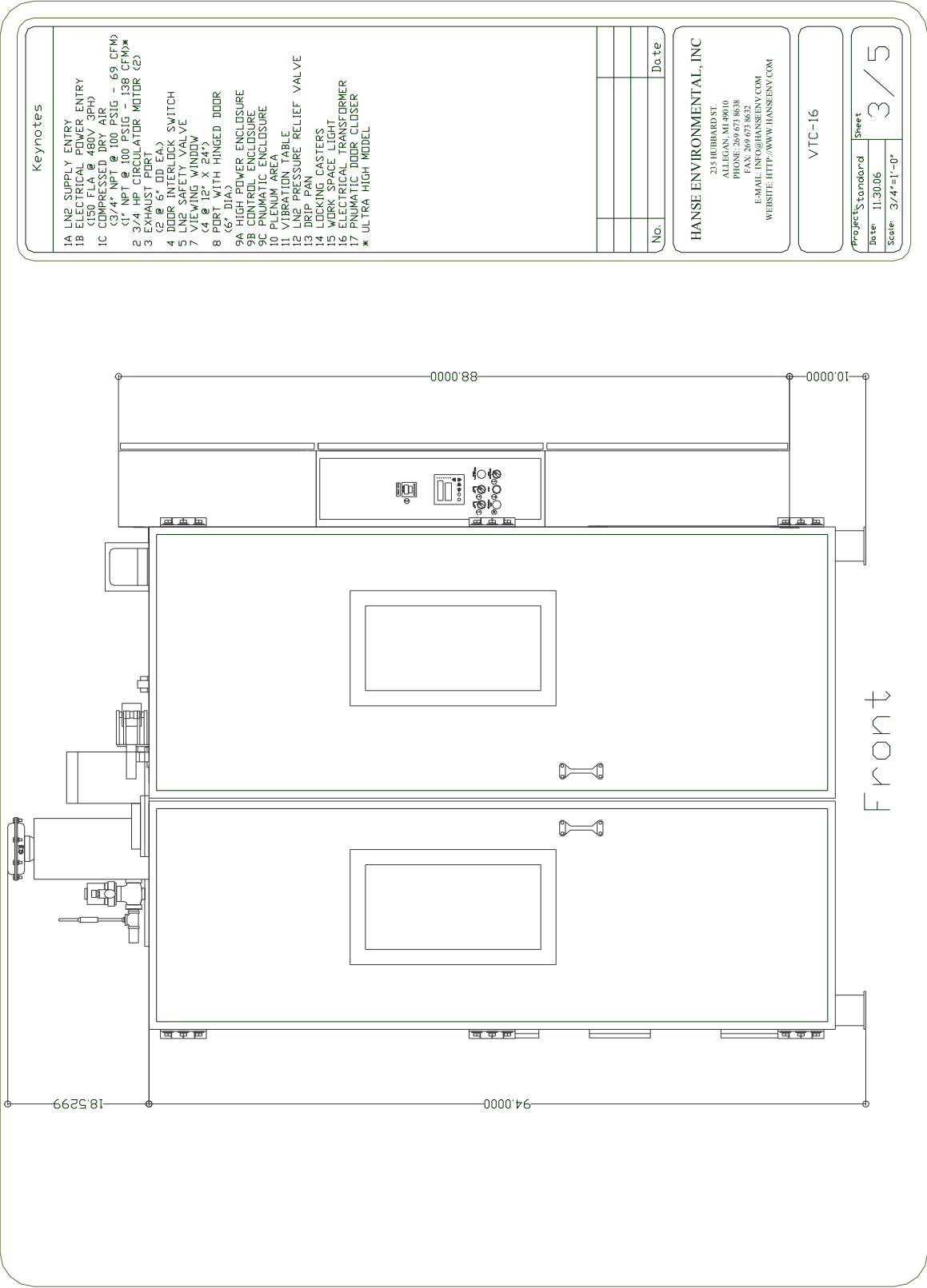


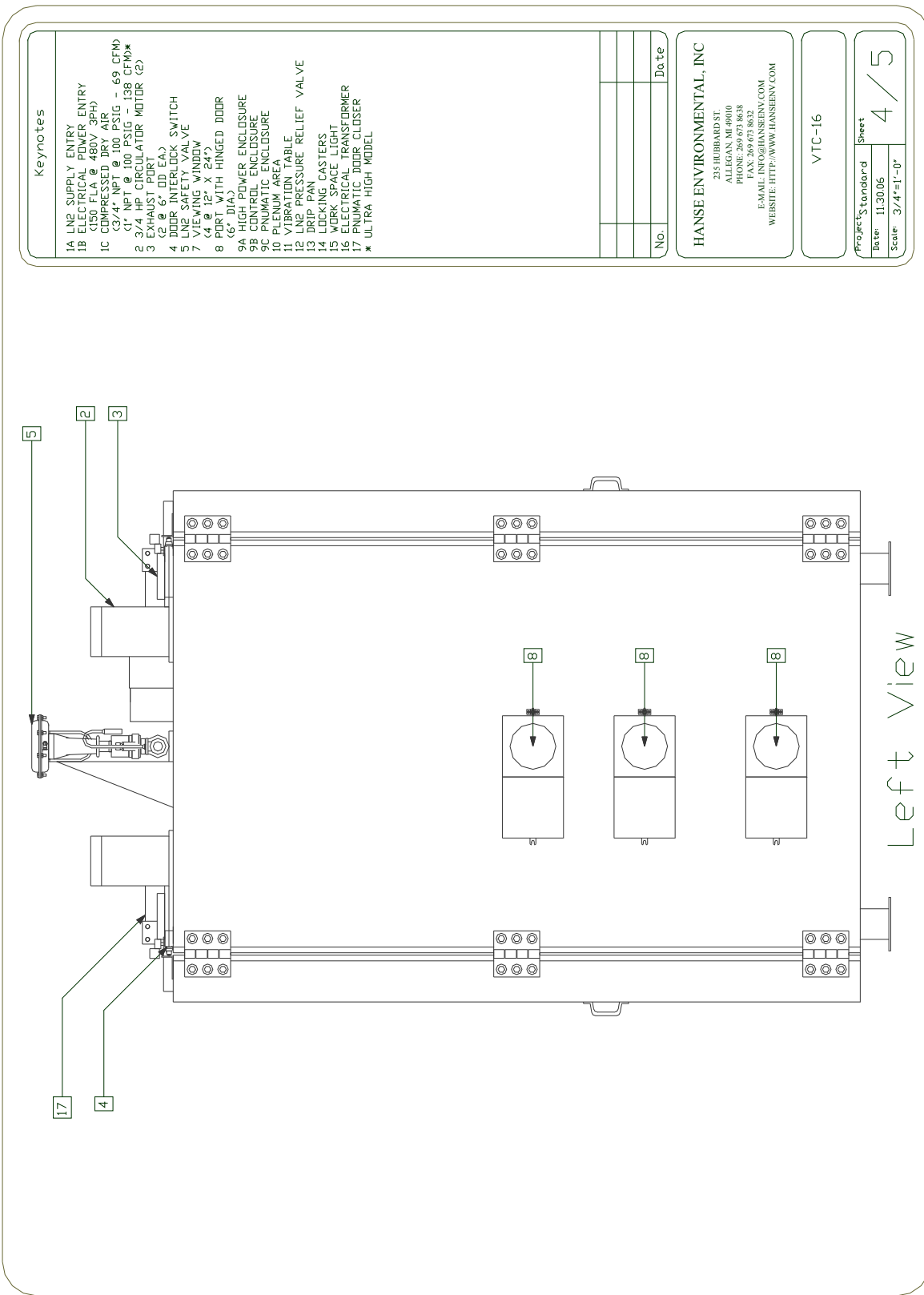
- Keynotes**
- 1A LNG SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (150 FLA @ 480V 3PH)
 - 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 69 CFM)
 - 2 3/4 HP CIRCULATOR MOTOR (2)
 - 3 EXHAUST PORT
 - 4 DOOR INTERLOCK SWITCH (2 @ 6" DIA)
 - 5 VIEWING WINDOW (4 @ 12" X 24")
 - 8 PORT WITH HINGED DOOR (6" DIA)
 - 9A HIGH POWER ENCLOSURE
 - 9B CONTROL ENCLOSURE
 - 9C PNEUMATIC ENCLOSURE
 - 10 PLENUM AREA
 - 11 AIR FILTER
 - 12 VALVE PRESSURE RELIEF VALVE
 - 13 DRIP PAN
 - 14 LOCKING CASTERS
 - 15 WORK SPACE LIGHT
 - 16 ELECTRICAL TRANSFORMER
 - 17 PNEUMATIC DOOR CLOSER
 - * ULTRA HIGH MODEL

HANSE ENVIRONMENTAL, INC
 235 HUBBARD ST.
 ALLEGAN, MI 49010
 PHONE: 269.673.8638
 FAX: 269.673.8638
 E-MAIL: SALES@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

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Front Doors Open





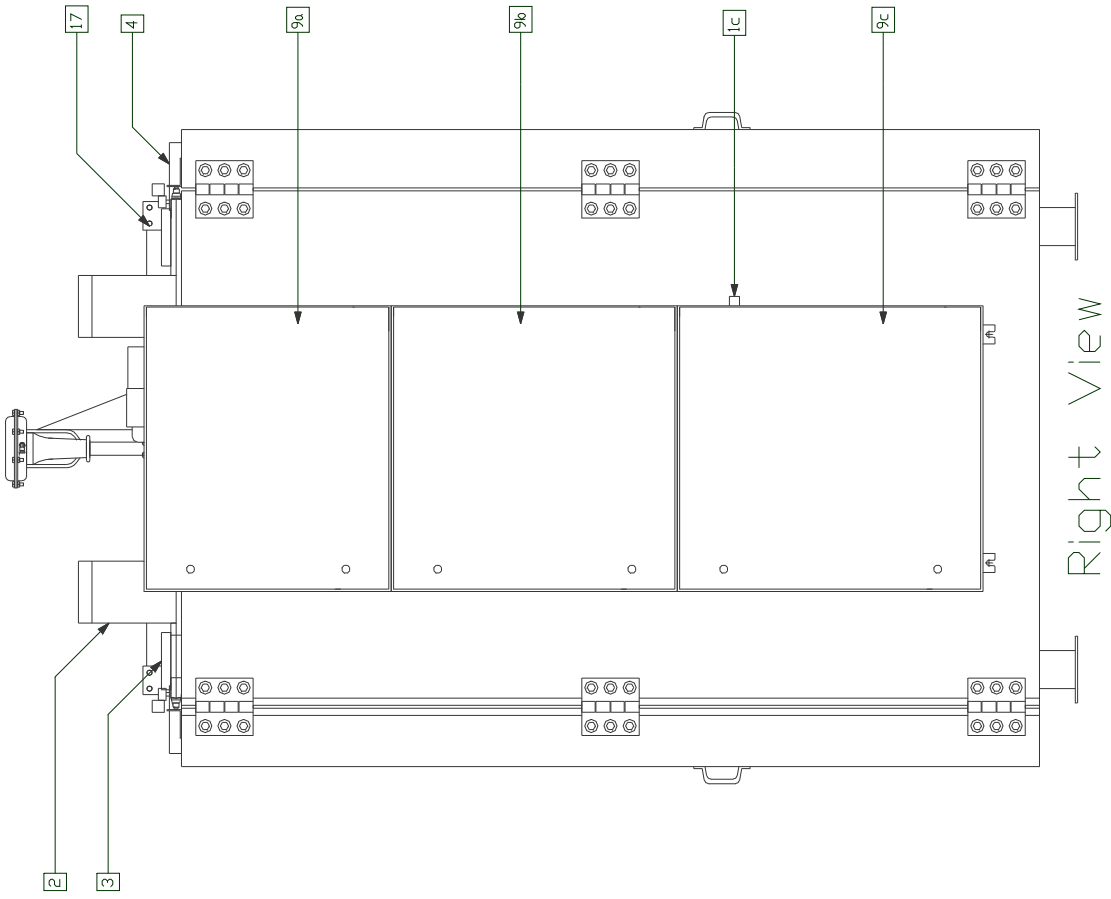
- Keynotes**
- 1A LNG SUPPLY ENTRY
 - 1B ELECTRICAL POWER ENTRY (150 FLA @ 480V/3PH)
 - 1C COMPRESSED DRY AIR (3/4" NPT @ 100 PSIG - 69 CFM)
 - 2 3/4 HP CIRCULATOR MOTOR (2)
 - 3 EXHAUST PORT (2 @ 6" ID EA)
 - 4 DOOR INTERLOCK SWITCH
 - 5 DOOR INTERLOCK VALVE
 - 6 VIEWING WINDOW (4 @ 12" X 24")
 - 8 PORT WITH HINGED DOOR (6" DIA)
 - 9A HIGH POWER ENCLOSURE
 - 9B CONTROL ENCLOSURE
 - 9C PNEUMATIC ENCLOSURE
 - 10 PLENUM AREA
 - 11 VIBRATION ISOLATOR
 - 12 VIB PRESSURE RELIEF VALVE
 - 13 DRIP PAN
 - 14 LOCKING CASTERS
 - 15 WORK SPACE LIGHT
 - 16 ELECTRICAL TRANSFORMER
 - 17 PNEUMATIC DOOR CLOSER * ULTRA HIGH MODEL

No.	Date

HANSE ENVIRONMENTAL, INC
 233 HUBBARD ST.
 ALLEGAN, MI 49001
 PHONE: 269.673.8638
 FAX: 269.673.8632
 E-MAIL: SALES@HANSEENV.COM
 WEBSITE: HTTP://WWW.HANSEENV.COM

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PROJECT Standard	SHEET
Date: 11.30.06	5 / 5
Scale: 3/4"=1'-0"	



Right View

Other Hanse Chamber Sizes

Other stander and custom Hanse VTC chamber sizes are available. If you need drawings for your installation please contact info@hanseenv.com or +1 269-673-8638 to get drawings.