



USER MANUAL

iDRY, LLC

10th Edition

Please visit our Youtube page for helpful technical videos: <u>iDRY Youtube</u> Contact Technical Support: 800-406-1887 x2

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Introduction	4
Safety	
Specifications	
Technical Drawings	
iDry Standard	
iDry PLUS	
Installation & Startup:	8
Placement	8
Track & Trolley Installation	
Power	
Plumbing	
Loading	
Closing Door	
Powering Up	
Kiln Monitoring	
Daily Monitoring	
Unloading Kiln	
Opening Door	
Checking Oven Weighted Samples	
CORRECT USE	20
Lumber preparation	
Baffling	20
Proper Stacking	
Reducing Degrade	
Winter vs Summer	
Initial Moisture Content	

Mixing Species	21
Mixing Thickness	21
Frozen Lumber	21
Drying Interruptions	21
MAINTENANCE & BASIC PROCEDURES	22
Door Seal	22
Handwheels	23
Chamber Interior	23
Drain	23
Vacuum Pump	26
HMI	27
More Information	30
Troubleshooting	
Troubleshooting and Alarms	
Warning labels	
Terms and Conditions	35

Introduction

Congratulations on your purchase of an IDRY Systems iDRY lumber dryer. This equipment is a product of IDRY, LLC's quality engineering and manufacturing. With a high quality rugged stainless steel pressure vessel and state of the art electronics this iDRY dryer will, with proper maintenance provide long term satisfactory service. To obtain the best use of your iDRY dryer, please read this manual carefully. It will help you become familiar with the operation of the equipment and contains helpful information regarding installation, operation, maintenance and troubleshooting.

We hope you find this manual to be helpful in producing the high quality lumber your customers demand.



Safety

This equipment should be operated by trained personnel and maintained by certified professionals. The equipment is intended for non-treated lumber only and should not be used for any other purpose. Any modifications of the equipment or use of unauthorized parts is forbidden unless approved by the original manufacturer. Any electrical or plumbing work performed on this installation should be performed by certified professionals working to local codes.

Safety warnings are noted in each section; example below:

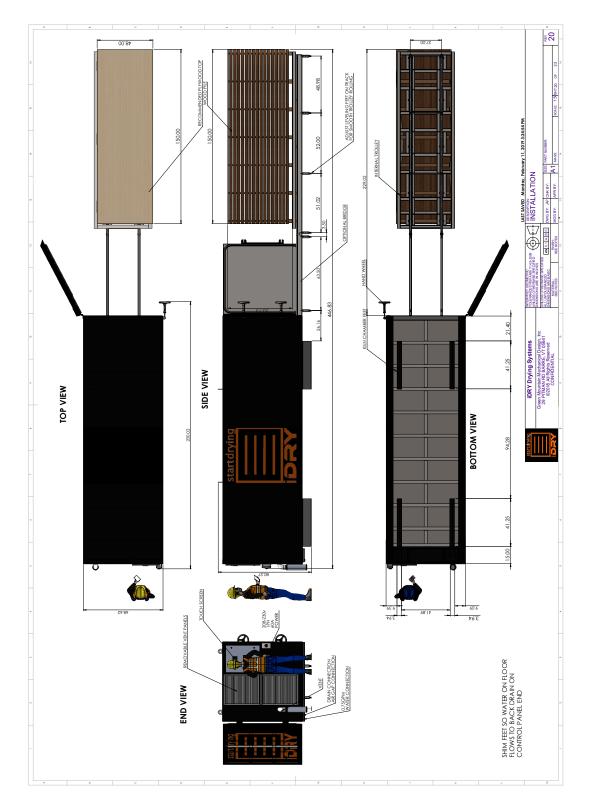
WARNING: THE VOLTAGES INSIDE THE CONTROL BOX ARE HIGH ENOUGH TO CAUSE DEATH IF YOU COME IN CONTACT WITH THEM.

Specifications

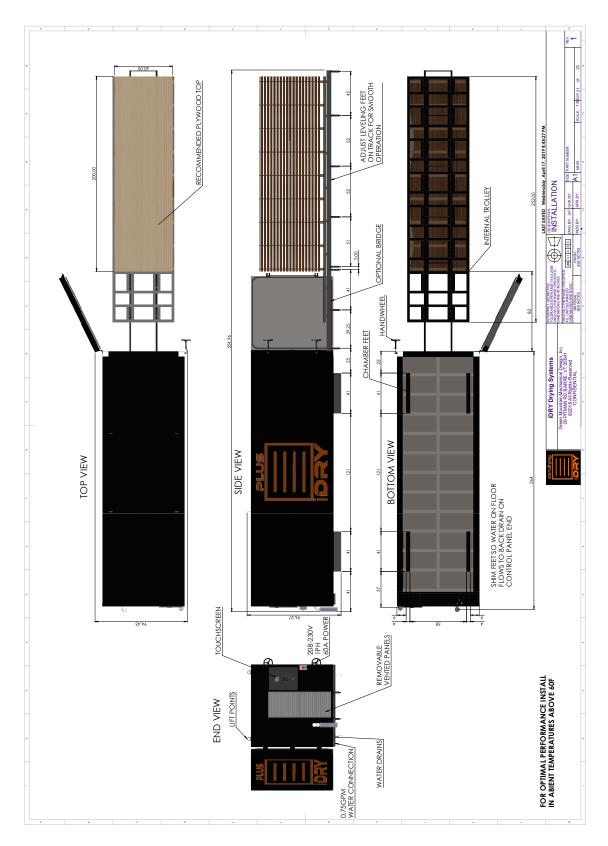
The following machine specifications are for iDRY Standard and iDRY Plus Lumber Dryers:

Main Power	208-240 VAC 1 Phase, 60 Amps
Water Supply	Soft & Clean Water @ 70 Deg F / 21 C or less with avg flow of 0.75 Gallons per Minute / 2.8 Liters per minute, MIN 50 PSI
Drains	Air Gap (included) required - 2inch / 51mm PVC Connection
Installation Environment	Above freezing dry space. For best operating performance ambient temperature should be kept above 60 F / 15.5 C
Remote Connection Ethernet Cable 200 Feet / 60 Meters max	
Lumber	3/4inch / 1.9cm or greater stickers recommended
Lumber Load Capacity	STANDARD: 13ft Long x 48in Wide x 55in Tall / 3.96M Long x 1.2M Wide x 1.4M Tall
	PLUS: 17ft Long x 60in Wide x 65in Tall / 5.18M Long x 1.5M Wide x 1.65M Tall
Drying Time	Approximately 1 week per 1 inch (2.54cm) of thickness (Maple)

Technical Drawings *iDry Standard*



iDry PLUS



Installation & Startup:

Complete the following prior to iDRY Systems assisted startup procedure:

*You can also find tutorial videos here: <u>www.youtube.com/watch?v=Mg9MixxbL-M</u>

Placement

1	Locate Kiln Chamber in Dry, Climate controlled space at recommended temperature of 70 ${\rm DegF}$ / 21.1 C
2	Loosen Handwheels just enough to rotate them out of the way (if you continue to loosen the threads the hand wheels will come off.
3	Shim chamber to ensure water flows to drain (chamber is pre-shimmed 1/2inch / 1.27cm)
4	Remove the ratchet Straps, then remove Track, Trolley and Bridge sections from chamber. Set aside the cardboard box.



Track & Trolley Installation

4	The two pieces on top are called the track bridge extensions.
5	Match up the track bridges to the chamber and the track frame using the two alignment tabs.
6	Adjust the track feet so that both the track and bridge are level leading up to the kiln chamber. *You will need either an adjustable wrench or an 1-1/8inch / 29mm wrench. All feet should be on the ground *The track can be used with, or without the track bridge extensions.



7 Using a string or straight edge, aligned the track angle peak from the chamber to the opposite far end of the track. It is imperative that the tracks on the track frame and extensions are in alignment with the track in the chamber. Failure to do so will result in the trolley coming off the tracks.

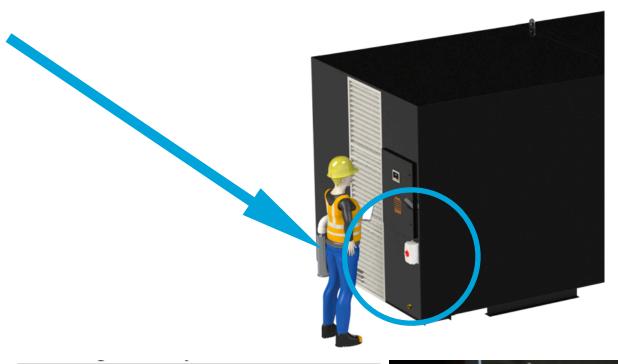


8 Place the trolley onto the track and perform an unloaded test to confirm the trolley rolls easily all the way in and out of the kiln chamber *For door operation you will need to move the track bridge extensions. For best results mark the floor where the track and bridge sections are lined up, or permanently affix the track frame to the floor



Power

9 Connect 208-240V 1PH 60A 60Hz electrical at Rotary disconnect located at control panel end of chamber





Risk of electrical shock, risk of damage to equipment.

Electrical installation work must only be executed by qualified personnel that knows and observes the following regulations: - IEC 364 or CENELEC HD 384 or DIN VDE 0100, respectively,

- IEC-Report 664 or DIN VDE 0110,

- BGV A2 (VBG 4) or corresponding national accident prevention regulation.



Plumbing

10	Connect 0.75GPM / 2.8 LPM of clean, 70F / 21C or less fresh water to connection port located on control panel end of kiln, left side underneath. The fitting is a 1/2" / 13mm female brass fitting.
11	Connect vessel drain with air gap (2" PVC / 51mm) to your facilities drain
12	Connect vacuum pump drain with air gap (2" PVC / 51mm) to your facilities drain





Loading

13	Place stickered pile of lumber or slabs onto Internal Trolley with not more than 3 inches of overhang on either side of trolley, with no overhang on either end of trolley
14	Confirm that pile height is 55 inches from top of track to top of lumber pile
15	Place stickers on top of pack of lumber and place a sheet of plywood or similar on top of stickers to prevent condensation from dripping on top layer of wood
16	Sticker placement in pile should be straight and provide for good air circulation through pile
17	Push trolley with stickered pile of lumber into chamber.

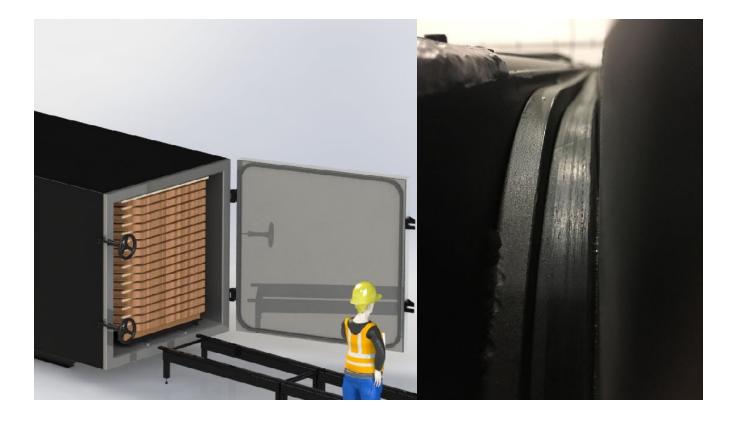


17 Remove bridge track sections.



Closing Door

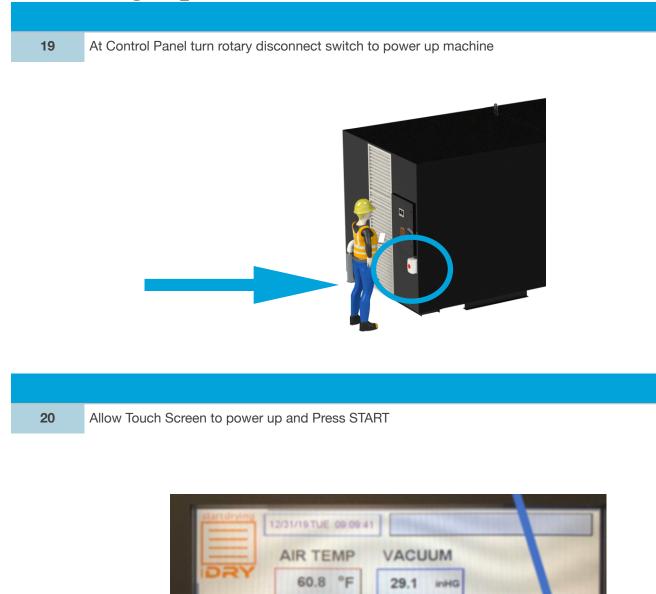
18 After confirming all persons have exited the chamber, close door and tighten hand wheels until rubber gasket contacts chamber sealing surface. *DO NOT OVERTIGHTEN HANDWHEELS, AND NEVER TIGHTEN HANDWHEELS WHEN CHAMBER IS IN OPERATION UNDER VACUUM



WARNING!! CHAMBER IS A CONFINED SPACE. NO PERSONS SHALL ENTER THE CHAMBER WITHOUT A TRUSTED "BUDDY" TO SUPERVISE AND ENSURE NO PERSONS ARE IN THE CHAMBER WHEN THE DOOR IS CLOSED OR WHEN THE MACHINERY IS IN OPERATION

WARNING!! DO NOT TIGHTEN HAND-WHEELS AFTER CHAMBER IS UNDER VACUUM - THIS WILL RESULT IN DAMAGE TO THE HAND-WHEEL!!

Powering Up



START

STOP

Fan

Status

Drain Cycle

Graph

21	Monitor the vacuum set point for a few minutes to ensure that the actual vacuum begins to drop towards 7-8inHg (270 hPa) Vacuum
22	The temperature will automatically warm up the wood slowly and continue to rise over time. The temperature will raise slower using low power mode.
23	The kiln will reach a max temperature of 160 Deg F / 71C but the time to get there will vary depending on low or full power mode, species, initial MC%, thickness and other factors.
24	Moisture content should be checked weekly. Time will vary by species but 4/4 Maple will take about one week to dry. Each inch more would take and additional week. Some species take longer. Moisture content can be checked with either a moisture meter or by oven weight method. <i>*it is recommended you wait at least 25 minutes to open the door after machine is stopped to allow vacuum to release and chamber to cool</i>
20	If wood is not dried to desired moisture content, close door and press start to continue drying



Problem: Actual Vacuum value not decreasing

Possible Cause: Door may be leaking vacuum due to seal not fully contacting the sealing surface of the chamber. Solution A: For a short term solution Using tape the operator
 may plug small cracks to make the door seal, once the door has pulled in and the seal is compressed the problem should stop.
 Solution B: iDBY LLC can provide rubber shims for problem areas where the rubber seal

Solution B: iDRY, LLC can provide rubber shims for problem areas where the rubber seal does not fully contact the chamber



Problem: Temperature is above 70F

Possible Cause: Higher than normal water temperature will cause the vacuum pump to run more and possibly not reach the vacuum set point.

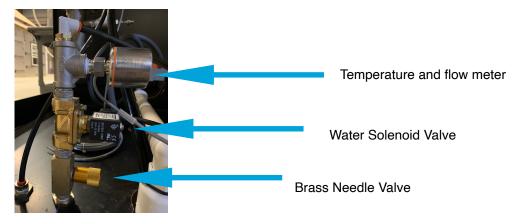
Solution: Check that water supply hasn't warmed up.Lower water temperature by chiller or new water source.



Problem: Vacuum Pump Water Flow is below 0.25 gpm **Possible Cause:** Lack of water pressure caused by restriction, solenoid valve closed, water pump failure, Flow meter failure, or insufficient supply **Solution:** Check Flow/Temp sensor ahead of vacuum pump water feed.

- Check water booster pump (if installed) is running. Check overall water

supply from well or city. Confirm no blockages in supply line Adjust brass Needle Valve to allow for increased flow



iDRY User Manual

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Kiln Monitoring

Once or twice per week the operator should spend a few minutes at the kiln to monitor the drying process and functionality of the kiln equipment.

The vacuum pump may only run periodically to maintain vacuum pressure.

At any time in the drying process the operator may press **STOP** and **Release Vacuum**. Once the vacuum is completely released the operator can open the door and check the condition of the wood.

The operator may also choose to open and check during a drain cycle. The kiln will enter a drain cycle once a day and drains for approx 20 Mins.

Unloading Kiln

Opening Door

- 1. Press STOP at control panel HMI (touchscreen)
- 2. Press Vacuum Release on the Touchscreen
- 3. Loose and swing free Door Hand wheels
- 4. Swing open door

Checking Oven Weighted Samples

1. Pull at least 4 of the sample boards that were oven tested and weight prior to starting the load. (Reference the ASTM D4442-15 standard for proper oven weight sampling of lumber samples for proper procedure.)



CORRECT USE

Lumber preparation

Care must be taken when preparing stacks of green lumber before the stacking and loading process begins. Pack widths and length combinations need to fill the complete length and width of the Internal Trolley with no less than 6 inches / 2.54cm of a gap between boards and chamber walls. Reference Stacking guide for more detail.

Baffling

Evening the air flow equals more even drying. If you have enough lumber to fill the kiln use additional material to baffle.

Large gap between pile and one end of chamber may result in short circuiting of airflow and improper heating. Move packs so the total lumber length is equal to the Trolley Length or baffle as necessary.

Proper Stacking

Lumber pile and stickers must be stacked vertically enough to fit into the kiln chamber using 3/4 inch / 1.9cm stickers. It is recommended that a sheet of plywood be placed on top of the lumber pile with stickers between the lumber and plywood to provide airflow over the top of the pile while reducing condensation dripping onto top of lumber.

Reducing Degrade

Drying slower can reduce degrade. Use LOW POWER mode or lower temperature set point until the lumber is below 25%.

Winter vs Summer

The kiln is designed to operate most efficiently in an operating environment of 70 Degs F / 21.1C. If your space is colder in the winter time then the kiln could dry slower. If your space is warmer in the summer then it may dry faster. Using LOW POWER mode in the summer and improving the ventilation in the space would be recommended. Adding more insulation or space heating in the winter would be recommended.



Freezing temperatures could damage equipment. Excessive hot temperatures could damage electronics! Do not operate equipment in freezing environments.

Initial Moisture Content

4 or more kiln samples should be taken from each side of the kiln at the door end and place back on any layer that can be reached except the top layer.

Reference the ASTM D4442-15 standard for proper oven weight sampling of lumber samples for proper procedure.

Mixing Species

Species with similar drying characteristics may be mixed in the same load with some level of risk to the more difficult to dry species. Care should be taken to sample and control the kiln operation based on the more difficult to dry species or the wetter species. As an example Red Oak from Green and Hard Maple from Green would not dry similarly enough to dry together.

Mixing Thickness

Large variations in lumber thickness can be dried together with some degree of risk. Thicker lumber dries exponentially slower than thinner lumber and the kiln should be controlled based on the thicker slower drying lumber.

Frozen Lumber

Lumber that is frozen should be either thawed in warm storage prior to startup, or a warmup stage should be performed in the process before vacuum is applied.

Drying Interruptions

Interruptions in the drying process from checking the wood, maintenance or any other interruption causing the kiln to lose temperature and pressure for more than 2 hours will exponentially increase the drying time and may cause drying degrade. Rapid case hardening of the lumber during the interruption will slow the rate of diffusion of water to the surface of the wood. This drying process must be restarted with more heat and energy to continue the drying process.

MAINTENANCE & BASIC PROCEDURES

Door Seal

Visually inspect rubber gasket for excess cracking, distortion or gaps. As long as the seal is holding a vacuum it can be used. Door seal may be replaced with material provide by iDRY Systems and attached with contact cement.

Gaps or leaks may require rubber shims to take up the space where there is a gap causing a leak. iDRY Systems can provide these shims.



Handwheels

Hand wheels should be visually inspected on a weekly basis. Keep threads greased for smooth operation.



WARNING!! DO NOT TIGHTEN HAND-WHEELS AFTER CHAMBER IS UNDER VACUUM - THIS WILL RESULT IN DAMAGE TO THE HAND-WHEEL!!

Chamber Interior

Visually inspect the interior of the chamber after every kiln cycle to ensure there is no dirt or debris.



MAINTENANCE: Drain should be covered prior to vacuuming or sweeping out interior of chamber so as to prevent debris from entering drain system

WAIT A MINIMUM OF 25 MINUTES AFTER STOPPING MACHINE BEFORE OPENING DOOR

Drain

Drain may become clogged with debris and will require cleaning. Below are steps to clearing the drain:

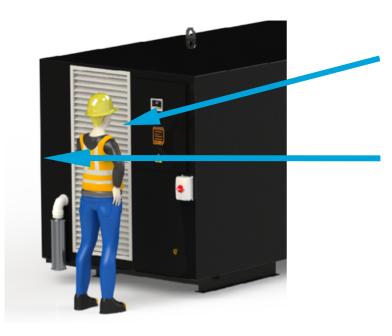
Tools Required:

Coat hanger or equivalent wire

Wet/Dry Vacuum Cleaner

5/16" / 8mm Tech screw tip or socket with impact adapter

Procedural Steps:	
Step 1:	Ensure the main power disconnect is in the off position.
Step 2:	Remove Aluminum louver doors
Step 3:	For easier access you can remove the aluminum skins by removing the self drilling screws.



Aluminum Louvers can be removed by hand and are secured by magnets

The black aluminum skin panels can be removed by removing the self drilling screws to gain better access

Procedural Steps:

Step 4:

Remove the PVC Drain elbow at the union. The union is hand tightened plus 1/4 turn. Push in on the manual release button and turn the handle to the open position.

Step 5:

Using a garden hose, place it in the end of the drain union and turn the water to send water up through the drain and into the kiln chamber.



Procedural Steps:		
Step 6:	From Inside the kiln you can get access to the drain opening inlet on the floor in the back right hand corner. You will have to remove the aluminum plenum to gain full access, or if you can slip a vacuum hose into the back corner you can suck up the debris that is on the floor. An alternative approach to the hose is to fish a piece of wire into the drain to push any debris through.	
Step 7:	Reinstall the drain elbow hand tight plus 1/4 turn. Install the aluminum skin panels reusing the screws you removed. Install the aluminum louvers.	





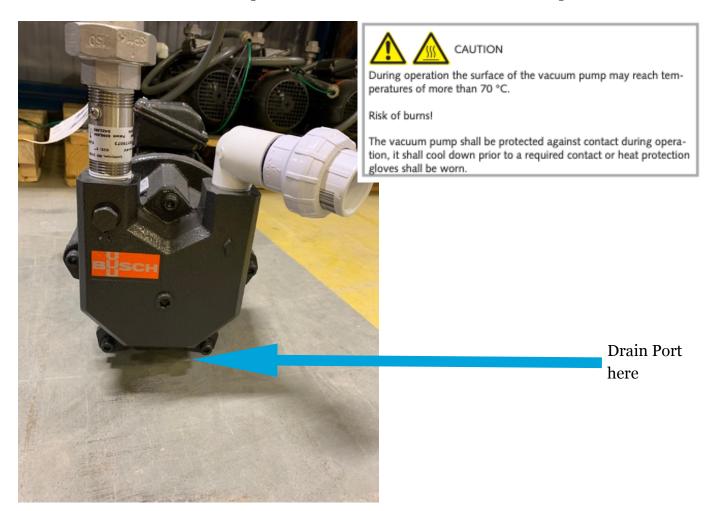


Floor Drain

Vacuum Pump

If the equipment will sit idle for more than 2 weeks or if stored in a location where freezing temperatures are a possibility the vacuum pump should be drained.

For further details regarding the operation, maintenance and safe use of the vacuum pump you should further consult the Busch Vacuum Pumps Operating Instructions Manual which can be found at: <u>https://www.buschvacuum.com/documents/10180/403552/</u> <u>Busch Instruction Manual Dolphin LX_0030-0430_B_en_0870152062.pdf</u>



HMI

The HMI (touch screen control) can be reprogramed to adjust the time and date based on your location following these procedures:

Step 1	Ensure the main power disconnect is in the off position.
Step 2	On the backside of the HMI, flip the #2 dip switch to the down position



Step 3

Power the HMI on. In the lower right corner press the left arrow icon



 Step 4
 Now Press the gear icon



Step 5

Enter the password (111111) and press OK



Select Time and Date. Time is in military time. Enter the correct date and time and press APPLY, then press OK



Step 7

With the Power OFF, on the backside of the HMI, flip the #2 dipswitch to the UP Position.

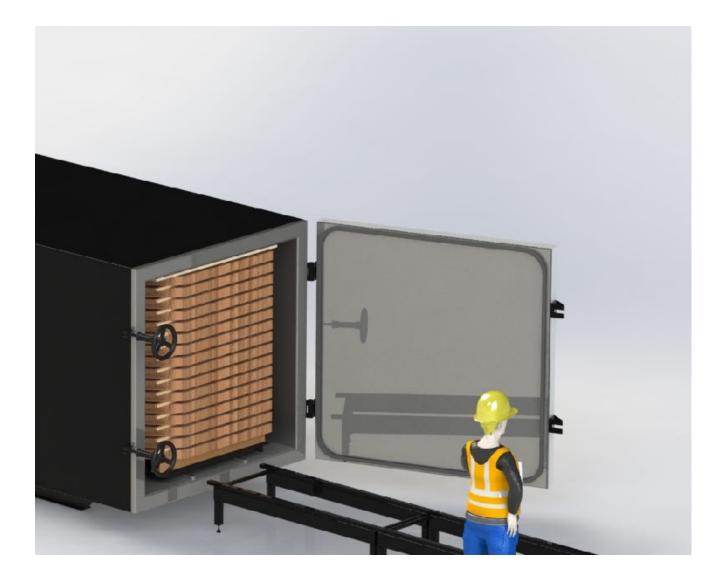


More Information

Additional information, technical manuals, installation drawings and procedural documents can be found on our website at <u>www.idrywood.com</u>, or by calling our technical team and requesting an electronic document.

iDRY Systems Technical Team: 800-406-1887 x3

Technical support hours are Monday thru Friday, 8am till 4pm Eastern Daylight time, or by



Troubleshooting

Troubleshooting and Alarms

ISSUE	Possible Cause	Solution
No power at start up	No power to Kiln	Verify facility power to Kiln is turned on
	Incoming power wires to disconnect mis- wired	Verify power wires to the disconnect are landed to the corresponding connections
	Main disconnect not turned on	Turn on the main disconnect
	Circuit breaker tripped	In the control panel box. Located in the top right corner. Flip the breaker to the up position
Vacuum pump does not run	No power to the pump	Check in the control panel box. In the bottom right corner. Verify the display in lit up.
	Pump has a locked rotor	Using the Locked rotor instructions. You will need to rotate the motor internal to the pump.
	No water to pump	Check water connection and flow rate
Vacuum pump runs but no vacuum in chamber	Door not closed	Verify there is no obstruction between the door gasket and kiln. verify the door is closed tightly.

ISSUE	Possible Cause	Solution
	No cooling water to the pump	Verify you have the proper water pressure going to the kiln. On the water flow meter. Verify the display is showing water flow.
	Flow Meter display is reading zero	Check water supply
Vacuum Pressure displayed on the HMI display is reading zero	Transducer not reading	Loose connection on TB1100, TB3v+ and TB3v- in control panel box. Bad Transducer Replace
Alarm: Fan Drive Fault Alarm: No Water to Vac Pump	Power Fluctuation	Power the Kiln down for 60 seconds and restart
	Drive controller over current	Power the Kiln down for 60 seconds and restart if Error persists verify the motor or blade is free of any debris.
	No Cooling water to vacuum pump	Verify you have the proper water pressure going to the kiln. On the water flow meter verify the display is showing water flow.
Alarm: Vac Pump drive Fault	Power Fluctuation	Power the Kiln down for 60 seconds and restart

ISSUE	Possible Cause	Solution
	Drive controller over current	Power the Kiln down for 60 seconds and restart if Error persists verify the motor or blade is free of any debris.
Alarm: High Temperature	Temp Probe not Reading	Loose Connection on CO-04RTD Module R1+, R1- and R1C or R2+, R2- and R2C Bad Temp probe Replace
Alarm: Cant Reach Vacuum	Vacuum not achieved within 45 minutes	Vacuum leak Door Seal leak. Verify door seal is free from debris and door is closed tightly
Excessive water build-up on floor of Kiln	Floor drain hole plugged with debris	Clean and clear debris from drain
	Kiln not shimmed to slope toward the drain	Shims should be placed under the feet to slope the kiln toward the control panel end slightly towards the drain connection
Wood has checked	Too high temperature during drying	Use low power mode
	Initial moisture content too high for drying species	Air dry to 30% core moisture content
Wood moisture content uneven	Uneven airflow distribution	Use air flow baffling
	Sticker thickness too thin	Use 3/4" or thicker stickers. Thicker lumber requires thicker stickers

ISSUE	Possible Cause	Solution
	Space between wall and wood pile too small	Use 8" or more space between chamber wall and either side of lumber pile for proper air circulation
Wood has honeycombed	Initial drying temperature or degrees of super heat were too high	Use low power mode
	Initial moisture content too high for drying species	Air dry to 30% core moisture content

Warning labels



Burn Hazard



Refer to Operators Manual



Risk of Electrical Shock!



Shut off machine before servicing



General Warning



Confined space. Buddy system is required

Please visit our Youtube page for helpful technical videos: <u>iDRY Youtube</u> Contact Technical Support: 800-406-1887 x2

Terms and Conditions

PLEASE READ THIS DOCUMENT CAREFULLY. IT CONTAINS VERY IMPORTANT INFORMATION REGARDING YOUR RIGHTS AND OBLIGATIONS, INCLUDING LIMITATIONS AND EXCLUSIONS THAT MIGHT APPLY TO YOU.

These terms and conditions apply to the purchase and sale of products and services through IDRY, LLC (referred to as the "Company") and idrywood.com (referred to as the "Site (s)"). By placing an order for such products and services, you agree to be bound by and accept these terms and conditions. If you do not agree to these terms and conditions, you should not obtain products or services from this Company or the site. These terms and conditions are subject to change by the Company (at time also referred to as "us" or "we") without prior written notice at any time, in our sole discretion. The latest version of the terms and conditions will be posted on the Company web site, and you should review these terms and conditions prior to purchasing any product and services that are available through the Company or through the Company's site. Also, these terms and conditions are an integral part of the Site Terms of Use that apply generally to the use of our Site. You should also carefully review our Privacy Policy before placing an order for goods or services from the Company or through this Site.

1. Order Acceptance and Cancellation

Your receipt of an electronic or other form of order confirmation does not signify our acceptance of your order, nor does it constitute confirmation of our offer to sell. We reserve the right at any time after receipt of your order to accept, decline, or limit your order for any reason, whether or not your credit card has been charged. If your credit card has been charged and your order is canceled you will receive a prompt refund credit to your account. We reserve the right at any time after receipt of your order, without prior notice to you, to supply less than the quantity you ordered of any item.

Once an order ("Order") has been placed, it cannot be cancelled unless the shipment is unavoidably delayed. In this case, we will do our best to cancel the order if requested.

We are a manufacturer selling products to end user customers and do not accept orders from dealers, exporters, wholesalers, or other customers who intend to resell the products and services which are offered by the Company or on our Site.

We make every effort to maintain the availability of our Site. However, should we experience technical difficulties, we are not responsible for orders that are not processed or accepted. The price quoted is exclusive to only the items listed in the quotation, or otherwise agreed in writing. Even in the event all terms of the quotation and price are accepted by the Company, the Company always reserves the right to cancel shipping an order if there is reasonable concern for your credit worthiness.

3. Pricing, General Conditionals of Sale and Changes in Pricing and Products

If the price or terms acknowledged in your Order are different than the price and terms quoted by the Company, the price and terms quoted by the Company will be binding, unless changed in writing. In the event of a price dispute, you will be allowed 10 days from the date of the Order to contact the Company in writing to

specifically set forth the details of the price dispute but this does not allow you to cancel the Order. Cancellation of an Order or return of a purchased item must be pre-approved by the Company in writing prior to the return of the purchased item. All written authorizations provided to you by the Company for return of an item purchased from the Company must accompany the Order and shipping documents in order for the return of the purchased item to be credited to you.

We are constantly updating and revising our offerings of products and services, and we may discontinue products and services at any time without notice. To the extent that we provide information on availability of products or services, you should not rely on such information, and we will not be liable for any lack of availability of products or services that you may order through the Company or our Site.

All pricing for the products and services offered by the Company or available on our Site is subject to change. For all of our prices and products, we reserve the right to make adjustments due to changing market conditions, product discontinuation, material or parts price changes, errors in advertisements and other extenuating circumstances.

3. Payment Terms and Sales Taxes

Terms of payment are within our sole discretion and, unless otherwise agreed by us in writing, payment must be received by us prior to our acceptance of an Order.

For certain products we accept credit cards for such purchases. You represent and warrant that (i) the credit card information you supply to us is true, correct and complete, (ii) charges incurred by you will be honored by your credit card company, and (iii) you will pay charges incurred by you at the posted prices, including all applicable taxes, if any.

Otherwise Payments are to be made via wire transfer.

All payments must be in United States dollars. Current billing address and phone information must be included with every order. You agree to pay interest on all past-due sums at the greater of the rate of 1.5% per month or the highest rate allowed by law of the state where the Product is shipped and for legal expenses associated with collection. We retain a security interest in the products and all proceeds thereof until the full purchase price therefore (including taxes and additional charges) has been paid.

Charges for shipping and handling will be made in accordance with our then-current shipping policies, as described below.

4. Shipping Policy

We offer a variety of shipping options to meet your shipping needs. We use only premium carriers with various delivery options available for many items. Please check the Order or individual product page for specific delivery options. All deliveries are insured and guaranteed against loss, theft and damage. All shipping prices are quoted in United States dollars. No C.O.D. orders can be accepted. You are responsible for any imposed duty and taxes by any and all duly authorized governmental entity. Delivery shall be defined as the receipt of equipment or product whether at your facility (which may be loading onto a truck commissioned by the customer at our facility) or an alternative facility designated by you.

Please note the posted shipping time frame is listed on the Order or on the individual product page and may vary from item to item. The posted shipping time frame is contingent upon payment or credit card approval and may be delayed should we experience difficulties in obtaining authorization.

There may be occasional delays beyond the posted Order processing time. If the delay is more than 14 business days, we will send you an e-mail message notifying you of the delay. If the delay will be less than 5 business days, we will ship the product as soon as it is received. If your product is on backorder for more than 30 business days, we will send you an e-mail message asking if you want to cancel the Order. If you do not advise us that you would like to cancel the Order, we will keep the Order active and continue to send you inquiries every 5 business days until the Order is cancelled or delivery occurs.

These shipping terms are accepted by you by placing an Order with us.

Refer to the Delivery Schedule which sets forth the estimated delivery timeframe subsequent to the receipt of a signed contract, initial payment or Order.

5. Advertising Disclaimer and Trademarks

We are not responsible for the accuracy of the descriptions of products and services that are offered by us or are posted on our Site. Nor are we responsible for typographical, pricing, product information, advertising or shipping errors.

In the event a product or service is stated at or listed at an incorrect price or with incorrect information due to typographical error or error in pricing, we shall have the right to refuse or cancel any Orders placed for products or services listed at the incorrect price. We shall have the right to refuse or cancel any such Orders whether or not the Order has been confirmed and your payment is received or your credit card charged. If your payment is received or your credit card has already been charged for the purchase and your Order is cancelled, we will immediately issue a credit or refund check to you or your credit card account in the amount of the charge.

All trademarks and registered trademarks relating to products and services offered directly by the Company or available through the Company Site are the sole property of the Company.

6. INSTALLATION, STARTUP, AND TRAINING

Prior to delivery, you will provide proof that all required power, water, air supply and drains for the vacuum dryer and or ancillary equipment using licensed professionals (ie. locally licensed and insured Plumbers and Electricians).

Sufficient technical information will be provided with the products to allow proper operation and maintenance by you. Should you require unusual or special information or support, additional customer service or consulting costs will be charged. Installation of the primary supply of water, electricity, steam and air are your responsibility at your expense. Only a licensed plumber and electrician may perform installation work directly associated with the products manufactured by the Company and ordered by you. During the installation process the Company will work only with licensed professionals. If any work required for installation of the products purchased by you is performed by a person that is not licensed in the appropriate trade the limited warranties detailed in paragraph 7 below shall be voidable at the sole election of the Company. The Company offers onsite training or service after installation of any products. All onsite training or onsite or off-site service provided to you by the Company after installation of any purchased products shall be charged at the rate of \$950.00 per day for each Company representative together with all costs for travel, lodging and meals. All such costs shall be paid in advance or at the discretion of the Company at the conclusion of such services.

7. LIMITED WARRANTY

All Company products including all component parts to guarantee proper functioning of the Company products are deemed by the Company to be free of defects in workmanship and material for one (1) year from date of Delivery of the product purchased. This warranty is limited to repairing or replacing products which a manufacturer's investigation shows were defective at the time of installation by the Company. In the event of a warranty claim, you will be responsible to pay installation expenses, but not parts costs.

The express warranty set forth herein is in lieu of all other warranties, express or implied, including, without limitation, any warranties of merchantability or fitness for a particular purpose; all such warranties are hereby disclaimed and excluded by the Company. Repair or replacement of defective products as provided above is the sole and exclusive remedy provided hereunder and the Company will not be liable for any further loss, damages, or expenses, including incidental or consequential damages, arising directly or indirectly from the sale or use of this product.

USE OF OTHER THAN COMPANY PARTS VOIDS THIS WARRANTY

8. Disclaimer and Limitation of Liability

Our responsibility for defects relating to the products and services offered by us or available on our Site is limited to the procedures described in our return policy set forth below. EXCEPT FOR THE TERMS OF THE LIMITED WARRANTY SET FORTH IN SECTION 7 HEREOF, ALL PRODUCTS AND SERVICES OFFERED BY US OR AVAILABLE ON THIS SITE ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THE WARRANT OF NON-INFRINGEMENT. WITHOUT LIMITING THE FOREGOING, WE MAKE NO WARRANTY THAT THE PRODUCTS AND SERVICES OFFERED BY US OR AVAILABLE ON THIS SITE WILL MEET YOUR REQUIREMENTS; THE RESULTS THAT MAY BE OBTAINED FROM THE USE OF THE PRODUCTS OR SERVICES WILL BE EFFECTIVE, ACCURATE OR RELIABLE; OR THE QUALITY OF ANY PRODUCTS OR SERVICES WILL MEET YOUR EXPECTATIONS. SOME JURISDICTIONS LIMIT OR DO NOT ALLOW THE DISCLAIMER OF IMPLIED OR OTHER WARRANTIES SO THE ABOVE DISCLAIMER MAY NOT APPLY TO THE EXTENT SUCH JURISDICTION'S LAW IS APPLICABLE TO YOUR PURCHASE OF PRODUCTS AND SERVICES.

WE DO NOT ACCEPT LIABILITY BEYOND THE REMEDIES SET FORTH HEREIN, INCLUDING ANY LIABILITY FOR PRODUCTS AND SERVICES THAT ARE NOT AVAILABLE FOR USE OR FOR LOST OR CORRUPTED DATA OR SOFTWARE. IN NO EVENT SHALL THE COMPANY OR ITS SUBSIDIARIES, AFFILIATED COMPANIES, AGENTS, SHAREHOLDERS, EMPLOYEES, OR OFFICERS (COLLECTIVELY, OUR "AFFILIATES") HAVE ANY OBLIGATIONS OR LIABILITIES TO YOU OR ANY OTHER PERSON FOR LOSS OF PROFITS, FOR LOSS OF BUSINESS OR USE, OR FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR ANY OTHER THEORY OR FORM OF ACTION, EVEN IF WE OR OUR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY THEREOF, ARISING OUT OR IN CONNECTION WITH THE SALE, DELIVERY, USE, REPAIR OR PERFORMANCE OF THE PRODUCTS SOLD BY THE COMPANY OR AVAILABLE THROUGH THE COMPANY SITE. NO EMPLOYEE OR REPRESENTATIVE OF THE COMPANY IS AUTHORIZED TO MODIFY THIS LIMITATION.

OUR SOLE AND ENTIRE MAXIMUM LIABILITY FOR ANY REASON, AND YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY CAUSE WHATSOEVER, SHALL BE LIMITED TO THE ACTUAL AMOUNT PAID BY YOU FOR THE PRODUCTS AND SERVICES YOU HAVE ORDERED THROUGH THE COMPANY OR THROUGH OUR SITE.

SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR CERTAIN DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU TO THE EXTENT SUCH JURISDICTION'S LAW IS APPLICABLE TO YOUR PURCHASE OF PRODUCTS AND SERVICES.

9. Warranty and Return Policy

The products and services offered directly by the Company or available through the Company Site are covered under the Company limited warranty as detailed in Section 7 hereof.

We offer a 30 day return policy on selected products based on the Company's return policy. To return products, you must call 1-800-406-1887 or e-mail our Returns Department mark@idrysystems.com to obtain a Return Merchandise Authorization (RMA) number before shipping your product. NO returns of any type will be accepted without an RMA number. For faster service, please have the following information on hand when calling for an RMA number: customer name, invoice or order number, SKU number, and nature of the problem.

To expedite the processing of your refund or credit, we ask that products be returned within 7 days of the date that we issue the RMA. All returned products MUST be 100% complete, contain ALL original boxes and packing materials, have original UPC codes on the manufacturer boxes, and contain all manuals, blank warranty and registration cards, and other accessories and documentation provided by the manufacturer. You are responsible for shipping charges on returned items; we will match your shipping method on your replacement or exchange item(s). You must insure the shipment or accept the risk of loss or damage during shipment. We strongly recommend that you fully insure your return shipment against loss or damage and that you use a carrier that can provide you with proof of delivery for your protection.

If your order arrives in a damaged condition, save the merchandise AND the original box and packing it arrived in, and notify us immediately to arrange for a carrier inspection and a pick-up of the damaged merchandise.

DEFECTIVE returns can be returned directly to us within 10 days from the earlier of the sales Order or the installation date for, at our discretion, credit, replacement, exchange or repair. Any item that is missing the UPC can ONLY be replaced with the same item. After 5 days, all Company warranties apply and you should contact the appropriate Company warrant service provider identified by the Company on the sales Order.

NON-DEFECTIVE returns may be accepted within 30 days subject to company's discretion and a 20% restocking fee. Credit will be issued only in such instances where the Company deems the situation appropriate, and such items are returned in like new condition.

Questions regarding our warranty and return policies should be addressed via e-mail to *mark@idrysystems.com* or by regular mail to 29 Pitman Rd Barre, VT 05641, Attention: Mark. These policies set forth your sole and exclusive rights with respect to return of products and services that you may purchase through our site.

10. End User License Agreement

The use of all Company products require that you consent to the use of a software program which the Company has titled the "Dryer Control Software" (the "Software Product") and accompanying documentation. You agree that so long as you own and operate a Company Product you agree to be bound by terms and conditions of the End User Software Product License Agreement ("End User Software Product License Agreement") which shall be provided to you at the time of purchase of a Company Product. This Software Product is protected by copyright laws and treaties, as well as laws and treaties related to other forms of intellectual property. The Company. or its subsidiaries, affiliates, and suppliers own intellectual property rights in the Software Product.

As a Licensee of the Software Product you agree to download, use, copy, or change the Software Product is subject to these rights and to all the terms and conditions of the End User Software Product License Agreement.

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YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT BY INSTALLING, USING, OR COPYING THE SOFTWARE PRODUCT. IF YOU DO NOT AGREE TO ALL OF THE TERMS OF END USER SOFTWARE PRODUCT LICENSE AGREEMENT, YOU MUST NOT INSTALL, USE, OR COPY THE SOFTWARE PRODUCT.

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The End User Software Product License Agreement entitles you to install and use one copy of the Software Product. In addition, you may make one archival copy of the Software Product. The archival copy must be on a storage medium other than a hard drive, and may only be used for the reinstallation of the Software Product. This Agreement does not permit the installation or use of multiple copies of the Software Product, or the installation of the Software Product on more than one computer at any given time, on a system that allows shared use of applications, on a multi-user network, or on any configuration or system of computers that allows multiple users. Multiple copy use of installation is only allowed if you obtain a separate End User Software Product License Agreement for each user.

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Without obtaining prior written consent of the Company, you may not assign your rights and obligations under the End User Software Product License Agreement, or redistribute, encumber, sell, rent lease, sublicense, or otherwise transfer your rights to the Software Product.

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You may not use, copy, or install the Software Products on any system with more than one computer, or permit the use, copying, or installation of the Software Product by more than one user or on more than one computer. If you have been granted separate End User Software Product License Agreements you may not use, copy or install the Software Product on any system with more than the number of computers, PLCs or HMIs permitted by End User Software Product License Agreement, or permit the use, copying, or installation by more users, or on more computers than the number permitted by the End User Software Product License Agreement.

You may not recompile, "reverse-engineer", disassemble, or otherwise attempt to derive the source code for the Software Product.

You may not use the database portion of the Software Product in connection with any software other than the Software Product.

15. Restrictions on Alteration

You may not modify the Software Product or create any derivative work of the Software Product or its accompanying documentation. Derivative works include but are not limited to translations. You may not alter any files or libraries in any portion of the Software Product. You may not reproduce the database portion or create any tables or reports relating to the database portion.

16. Restrictions on Copying

You may not copy any part of the Software Product except to the extent that licensed use inherently demands the creation of a temporary copy stored in computer memory and not permanently affixed on storage medium. You may make one archival copy which must be stored on a medium other than a computer hard drive.

17. Limited Storage Medium Warranty

For a period of 90 days from the earlier of the date of installation or from the date that you download the Software Product, as applicable, the Company warrants that when properly installed and used under normal conditions, the storage medium on which the Software Product is shipped will be free of defects in material and workmanship. All such Software Product warranties are limited as well as stated in Section 7 and 8 hereof.

18. Consent to Use of Data

You agree that the Company and its subsidiaries may collect and use technical and related information, including but not limited to technical information about your Product, your physical location, system and application software, that is gathered periodically to facilitate the provision of software updates, product support and other services to you (if any) related to the Software Product. You further agree that the Company may use this information, as long as it is in a form that does not personally identify you, to improve our products, services and technologies.

19. Advertising Disclaimer and Trademarks

While the Company with its product information brochures or as stated on the Company Site strives to make every effort to include accurate descriptions of the products and services offered by the Company directly or on its Site, the Company hereby disclaims any unintended inaccuracy of such descriptions. It is impossible for the Company product information brochures or the Company's site to avoid typographical, pricing, advertising, or other errors in these descriptions.

In the unlikely event that an order is placed for a product or service which has been listed with an incorrect price or product information, the Company directly or on the Company Site reserves the right to refuse or cancel any such Orders.

All trademarks and registered trademarks relating to products and services offered by the Company directly or offered on its Site remain the property of the Company.

20. Safe Shopping Guarantee

In the event you use the Company Site, your browser and our secure server encrypt confidential information during transmission, ensuring that transactions stay private and protected. We guarantee the safety of your credit card information in the following manner: if any unauthorized use of your credit card occurs as a result of your credit card purchase on our Site, simply notify your credit card provider in accordance with its reporting rules and procedures. If, through no fault of your own, your credit card company finds credit card fraud but does not waive your entire liability for unauthorized charges, we will reimburse you for the remaining liability up to a maximum of \$1000. This guarantee applies to purchases made using our secure server (https: protocol).

You can always order by telephone. Call us at *1-800-406-1887* within the United States and Canada. We cannot accept orders from outside the United States or Canada. No matter how you place your order with us, we want you to have a satisfactory buying experience.

21. Privacy and Customer Information

We are committed to protecting your privacy. To make your purchasing experience more convenient, we gather information about you. We maintain the privacy of your information using security technologies and adhere to policies that prevent unauthorized use of your personal information. See our Privacy Policy.

At any time you may update your customer account information by following the instructions posted elsewhere on this site. Here you may update your name, password, billing address, shipping address, e-mail address, telephone number, and credit card information.

22. Force Majeure

In addition to any excuse provided by applicable law, we shall be excused from liability for non-delivery or delay in delivery of products and service available through our site arising from any event beyond our reasonable control, whether or not foreseeable by either party, including but not limited to, labor disturbance, war, fire, accident, adverse weather, inability to secure transportation, governmental act or regulation, and other causes or events beyond our reasonable control, whether or not similar to those which are enumerated above.

23. Entire Agreement

Except for the terms and conditions contained in the End User Software Product License Agreement, these terms and conditions constitute the entire agreement and understanding between us concerning the subject matter hereof and supersedes all prior agreements and understandings of the parties with respect thereto. These terms and conditions may NOT be altered, supplemented, or amended by the use of any other document(s). Any attempt to alter, supplement or amend this document or to enter an order for products or services which are subject to additional or altered terms and conditions shall be null and void, unless otherwise agreed to in a written agreement signed by you and us. To the extent that anything in or associated with site is in conflict or inconsistent with these terms and conditions, these terms and conditions shall take precedence.

25. Governing Law and Statute of Limitations

All company actions and the Company Site is controlled by us from our offices within the State of Vermont, United States of America. The Company and the Company Site can be accessed from all 50 states, as well as from other countries around the world. As each of these places has laws that may differ from those of Vermont, by accessing this site both of us agree that the statutes and laws of the State of Vermont, without regard to the conflicts of laws principles thereof, will apply to all matters relating to the use of this site and the purchase of products and services available through this site. Each of us agrees and hereby submits to the exclusive personal jurisdiction and venue of the Court of Washington County Barre, Vermont and the United States District Court for the District of Vermont with respect to such matters.

Any cause of action brought by you against us or our Affiliates must be instituted with Two (2) year(s) after the cause of action arises or be deemed forever waived and barred.

We make no representation that the products and services available at the Company or through the Company Site are appropriate or available for use in locations outside of the United States and Canada, and accessing them from territories where such products and services are illegal is prohibited. Those who choose to access this site from other locations do so on their own initiative and are responsible for compliance with local laws.

9. Privacy and Customer Information

In addition to the protections in Section 9 (§ 128:195), the site owner will typically include further information regarding information collected during sales transactions and the procedures taken to insure the privacy of such information. For example, the sales terms and conditions should include a cross-reference to the site's overall privacy policy. In addition, customers should be reminded of their ability to update their customer account information, including name, password, billing and shipping addresses, e-mail addresses, and credit card information.