DIRLEXAL



INSTALLATION & USER MANUAL

Please read and save this manual.

Thank you for purchasing this **Dirlexal** product.

Please read this manual carefully before attempting to install, operate, or service the products. Failure to follow the instructions may result in personal injury or property damage.

Please retain this manual for future reference.

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DESCRIPTION

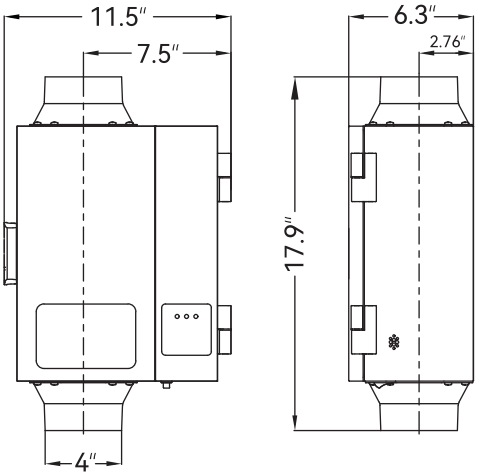
PBF1 is designed for use in residential clothes dryer ducts to enhance airflow and more effectively expel moist air from the dryer.

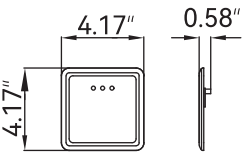
Installing a duct booster fan has become increasingly common, as laundry rooms are no longer always located adjacent to exterior walls. Dryer duct runs often exceed 25 feet—the maximum length specified by many dryer manufacturers. (Note: A 90° elbow adds the equivalent of 5 feet to the duct length, while a 45° elbow adds 2.5 feet.)

The PBF1 Duct Booster supports extended duct configurations, enabling effective operation with ducts up to 150 feet in total equivalent length.

SPECIFICATIONS

BLOWER	MOTOR	IMPELLER
160CFM	115Volts~60hz 0.80amps maximum	Full metal impeller with anti-foreign body mesh





LED Notification
Wall Plate

COMPONENTS

Filter x2
PBF1 Booster Blower x1
4-inch Duct Connector x2
External Indicator Board x1
External Extension Cord x1
Accessory Box for Installation x1

INSTALLATION RESTRICTIONS

WARNING:

This product contains rotating parts, DO NOT plug into power if duct is not connected on both ends of PBF1.

Installation must comply with local electrical, mechanical, fuel gas, and building codes, and must be inspected and accepted by the local authorities having jurisdiction.

CAUTION:

- Do not install in an exhaust duct system of a clothes dryer whose instructions prohibits the use of a booster fan.
- Maintain a minimum distance of 5 linear feet (1.524 meters) from the clothes dryer's exhaust outlet.
- Do not expose the fan to exhaust air exceeding 167°F (75°C).
- The Dryer Booster Fan must remain accessible after installation.
- Not compatible with high-output dryers.

WARNING (LED Status Alerts):
If no lights are on, or a blinking/solid Red LED appears on the Notification Panel: Turn off the clothes dryer immediately. Refer to the "Notification Panel Status Modes" section (Page 4) for troubleshooting.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- Do not install any additional duct boosters or inline fans in the same duct system as the PBF1, as this may interfere with its operation and cause malfunctions.

- The PBF1 must be installed in an area where ambient air temperatures are between -20° F and 140° F (-29° C and 60° C) and ambient humidity does not exceed 85% relative humidity.

- Do not install the PBF1 in a position where dryer exhaust temperatures exceed 167°F (75° C) at PBF1 inlet.

Note: The PBF1 thermal fuse is set at 176° F (80° C).

IMPORTANT: The dryer duct in which the PBF1 is installed **must**: Terminate with a dryer exhaust hood equipped with a flapper, OR HAVE a backdraft damper installed near the exterior termination.

SAFETY CONSIDERATIONS

1. Ensure your power source conforms to the electrical requirements of this product.

2. Check your local code restrictions for any additional safety measures required for a proper, code-compliant installation.

3. Read all instructions before installing and using this product.

4. If you are unfamiliar or have doubts about performing this product's installation, seek the services of a qualified, trained, and licensed professional. Improper installation will void this product's warranty.

5. This product must not be used in potentially hazardous locations such as flammable, explosive, chemical-laden, or wet atmospheres.

6. This product is not recommended for use in bathrooms.

7. Do not cover power cords with rugs or other fabric materials.

8. This product has rotating parts. Exercise safety precautions during installation, operation, and maintenance.

9. Do not insert or allow fingers or foreign objects to enter any ventilation or exhaust openings, as this may cause electric shock, fire, or product damage. Do not block or tamper with this product during operation.

10. Do not rely solely on the on/off switch to disconnect power. Always unplug the power cord before installing, servicing, or moving this product.

11. Do not operate this product if its cord is damaged, if it malfunctions, or if it has been dropped or damaged in any way.

12. When cutting or drilling into walls or ceilings, avoid damaging electrical wiring or other hidden utilities.

13. This unit must be properly grounded.

MINIMUM AND MAXIMUM DRYER DUCT LENGTH IN EQUIVALENT FEET

This product is intended for use in 4” diameter dryer exhaust ducts from 30 to 150 equivalent feet* in length.
Equivalent feet = Linear feet + (5 feet per 90° elbow) + (2.5 feet per 45° elbow)
(Assumes 4" diameter rigid metal duct)

Installation Recommendations:
For optimal performance, install the PBF1 within 3 to 65 equivalent feet from the dryer (regardless of total duct length).
Maintain at least 2 feet clearance from the terminal backdraft damper.
Alternative option: Install directly above the dryer.

MOUNTING DRYER DUCT BOOSTER

WARNING: DO NOT install the LB2 with the discharge facing downward.

Important Note: During winter, when cleaning the filter: Check for condensation accumulat ion in the sensor air tube. If condensation is present: Disconnect one end of the tube and use a clean, dry towel to remove all condensed water from side the tube.

1. Initial Setup: After unpacking, install the two duct connectors onto the unit (Refer to Figure 1).

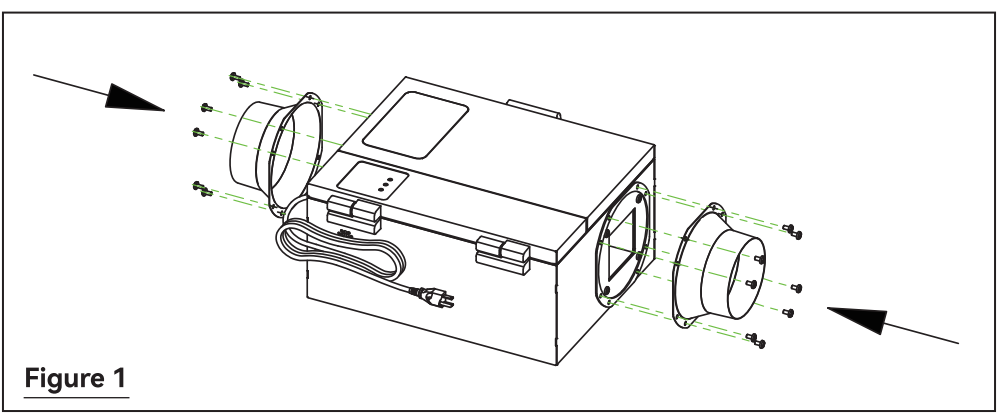


Figure 1

2. Wall Mounting (Above Dryer)

- Open the PBF1 cover and remove the panel to reveal five mounting holes at the bottom.
- Mark all five hole positions with a pencil (align left/right holes with wall studs).
- Insert included drywall anchors into marked positions.
- With two-person assistance, align PBF1 and secure with provided wood screws.
- **Important:** Seal any unused holes with aluminum foil tape (Refer to Figure 2).

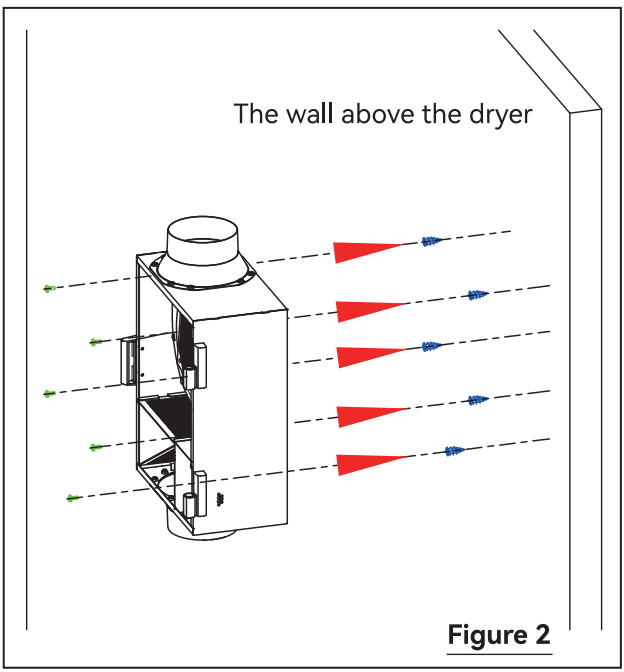


Figure 2

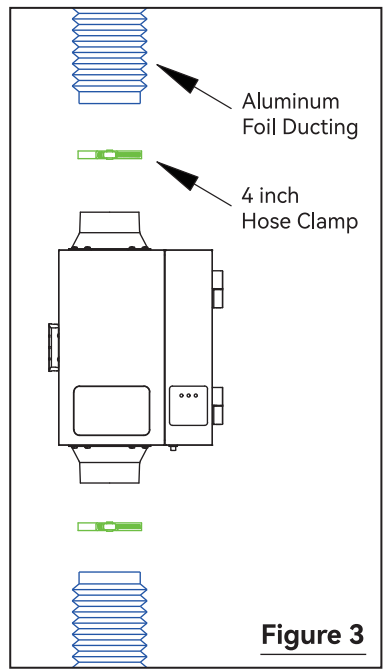


Figure 3

3. Attic Stud Mounting

- Mark all five mounting hole positions on studs.
- Secure unit directly to studs using included wood screws (no drywall anchors needed).
- Seal any unused holes with aluminum foil tape.

4. Duct Connection

For aluminum foil ducts: Secure with 4" hose clamps (user-provided).

For 4" steel ducts: Push duct firmly into place and seal perimeter with aluminum foil tape (Refer to Figure 3).

5. Final Assembly & Startup

- Carefully close cover, ensuring wire to indicator light board isn't pinched.
- Connect power supply and turn on the switch.(Figure 4).

WARNING: **Do not turn on dryer yet.** Wait **60 seconds** for automatic duct pressure calibration (blinking green light indicates ready status)

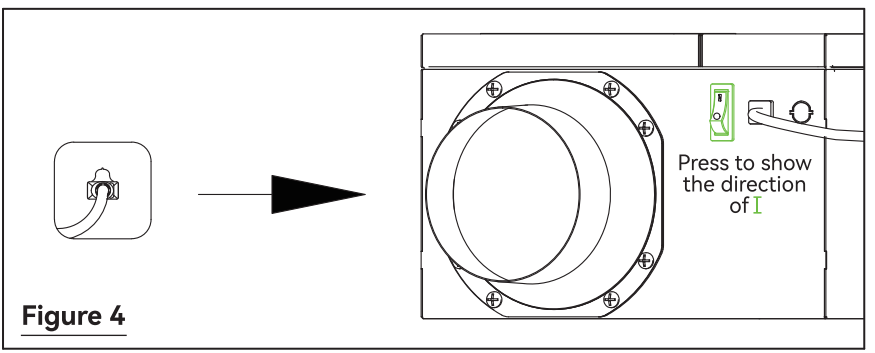


Figure 4

INSTALLING EXTERNAL DISPLAY PANEL

Note: This step requires the included 40-foot connecting cable.
Important: Ensure the installation location allows for proper cable routing within this 40-foot limit.

1. Prepare the PBF1 Unit

- Remove the detachable metal plate by bending it back and forth until it comes off.
- Secure the cable using included cable clips (leave sufficient slack for connection).
- Insert the cable into the hole left by the removed plate.
- Align the connector with the motherboard socket and firmly insert it (Note: Pliers are required for this step). (Figure 5)

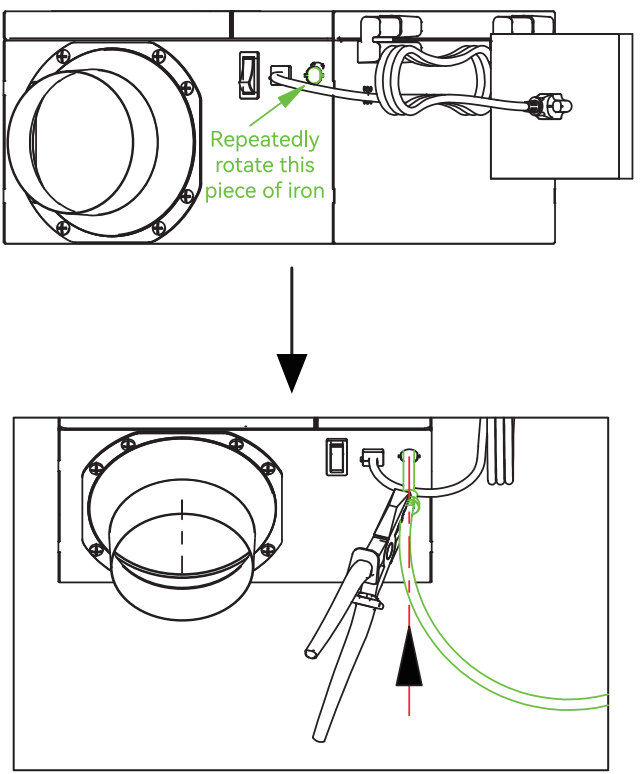


Figure 5

2. Prepare Installation Location

- Determine the desired location for the external display panel.
- Cut a mounting hole measuring 74mm (L) × 39mm (W).
- Caution: Avoid cutting into wall studs.

3. Install Display Panel

- Route the pre-installed 40-foot cable through the wall to the display location.
- Connect the cable to the display panel.
- Secure the panel using included wood screws.
- Apply the provided sticker onto the display panel. (Refer to Figure 6)

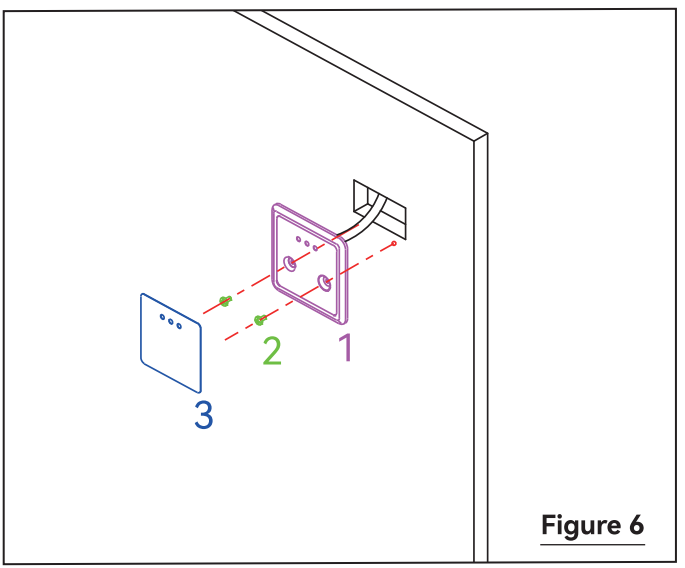
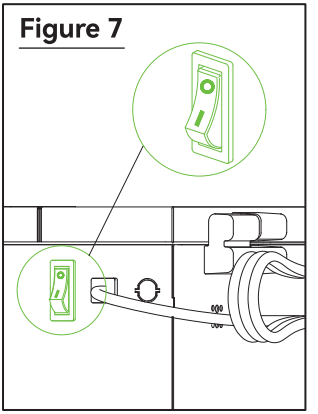


Figure 6

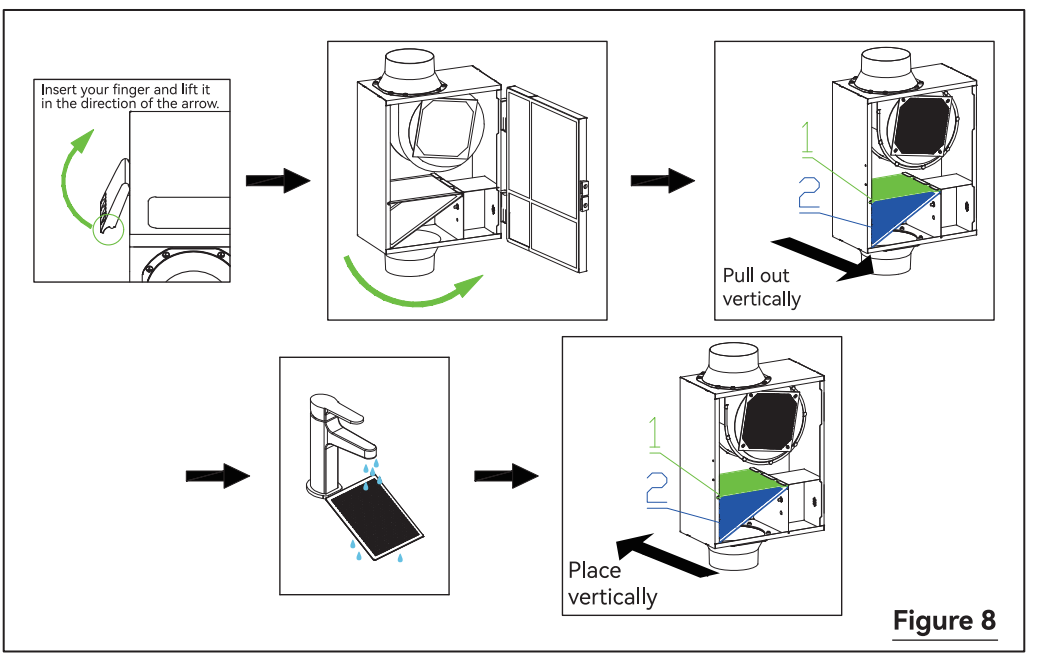
CLEANING THE FILTER SCREEN

1. Before cleaning the filter screens, ensure both the dryer and PBF1 are powered off (the switch next to the power cord is at the "O" (Off) position)! Ensure the dryer is not running.
(Figure 7)



2. Prepare a trash bag for disposal. Open the PBF1 cover and remove the two indicated filter screens in sequence, dispose of large accumulations in the trash bag, and wash both filter screens in water. Also clean any buildup inside the pipeline.

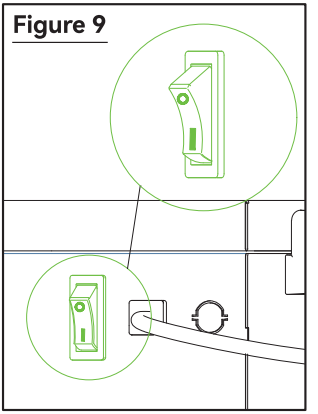
3. After cleaning, simply reverse the removal process and insert the two clean dry filter screens into their corresponding slots. (Figure 8)



4. For the square filter screen on the fan, use a vacuum cleaner or a damp cloth to wipe away the lint attached to the surface.

5. After closing the cover, ensure no cables are pinched. Then, turn the PBF1 switch on (the switch next to the power cord is at the "I" position). After powering on, please wait patiently for 60 seconds. For specific operations, you may refer to Step 5 in the installation section above. (Figure 9)

Figure 9



NOTIFICATION PANEL STATUS LIGHTS

Light	Display State	Cause	Solution
Green	Flashing	Unit is in standby mode. This is normal.	No action required. The unit is ready for use.
	Solid On	PBF1 is operating normally. This is normal.	No action required.
	Off	The unit has no power or an internal error has occurred.	1. Check if the internal wiring is securely connected. 2. If the light remains off, contact the after-sales service department promptly.
Red	Off	This is normal	No action required.
	Solid On (with buzzer)	PBF1 has detected a high temperature at the air intake, triggering an alarm.	1. Immediately turn off your dryer and disconnect power to the PBF1. Failure to do so may create a fire hazard. 2. Do not turn on the dryer or PBF1 until the temperature has returned to normal. 3. Wait for the temperature to return to room temperature, then reconnect the power. The PBF1 will initiate a new self-test cycle; please wait patiently.

Light	Display State	Cause	Solution
Yellow	Off	This is normal	No action required.
	Alternately Flashing (with buzzer)	PBF1 has detected a blockage at the air intake, triggering an alarm.	1. Turn off the dryer and PBF1. 2. Wait until there is no airflow inside, then open the cover. 3. Clean the filter screens (refer to the cleaning procedures in this manual). It is recommended to clean the filters to avoid an internal pressure imbalance upon reassembly. 4. After closing the cover, ensure no cables are pinched. 5. Turn the PBF1 power switch to the "I" (On) position. After powering on, wait patiently for 60 seconds for the self-test to complete.

WARNING:

If you see a flashing yellow light, a steady red light, or no light at all, and do not take immediate action, this may pose a fire hazard.

For any abnormal indicator light status not described above, please contact after-sales service promptly. We will resolve your issue quickly and effectively.

CALIBRATION PROCEDURE

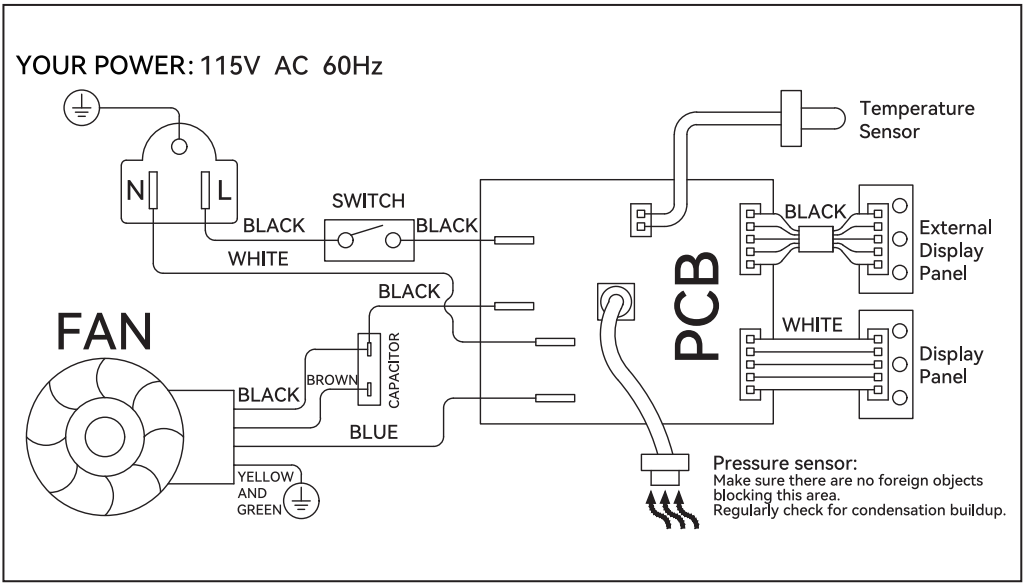
Important: Ensure all of the following steps are completed before powering the PBF1.

- Confirm that the PBF1 and the entire duct system are fully installed and completely free of lint. (This is essential for proper calibration.)
- Verify the dryer is turned off and completely cooled down.
- Check that all lint collectors are empty and properly reinstalled.
- Ensure there are no clothes remain in the dryer.
- Make sure the dryer door is securely closed.
- Plug in the power cord or turn on the circuit that supplies power to the PBF1.

Note: Within 60 seconds of power-on, the PBF1 dryer booster will activate calibration mode and run for up to 60 seconds. (This is the calibration period occurs only during first-time power-on. During this time, all panel LEDs (red, green, yellow) will remain solid. Once the calibration is complete, only slow-blinking green LED appears.

When the green light starts blinking slowly, the PBF1 is calibrated and ready for dryer operation.

WIRING DIAGRAM



WARRANTY

DIRLEXAL PRODUCT CO., LTD warrants the equipment to be free from defects in workmanship and materials for a period of 12 months after shipment. This warranty is limited, however, to the repair or replacement of defective equipment at the manufacturer's discretion. If it is necessary to return unit for service, customer is solely responsible for proper packaging and transportation costs to and from the service center. Customer must initiate warranty process by contacting Dirlexal. Do not send any component or product back to Dirlexal without a Return Material Authorization.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, during installation, has been subject to misuse, has not been installed, operated or serviced according to the Seller's instructions, or has been operated beyond the seller's rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty. Lack of proper maintenance voids this warranty.

This warranty does not cover corrosion, freezing or acts of nature – flooding, fire, water damage, power surges, and hurricane or storm damage.

Seller's liability is limited to replacement of defective parts or components and does not include any cost of labor (including, but not limited to, labor to remove and/or reinstall any defective part). Customer may elect to have unit fixed locally with prior authorization in which case required replacement parts will be sent to customer at customer'sexpense.

Dirlexal shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. DIRLEXAL total liability, regardless of nature of claim shall not exceed original purchase price of the product. If a product or component is replaced while under warranty, the applicable warranty period shall not be extended beyond the original warranty time period.

The foregoing shall constitute the total liability of seller in the case of defective performance of all or any of the equipment or services provided to Buyer. Buyer agrees to accept and hereby accepts the foregoing as the sole and exclusive remedy for any breach or alleged breach of warranty by Seller.

Warranty

Thanks for your purchasing from DIRLEXAL!

At DIRLEXAL, we're dedicated to delivering the best possible experience for our users.

If you like our item, write down your feeling and let others know, which not only help us to improve products and services, but also help other customers to make a wise choice.

Thank you for helping us shape a better future. Your opinion truly matters to us.

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