Owner's Manual
Air Drying System for DriForce® Airmover

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The Air Drying System is designed to be used with the DriForce Airmover to direct high-pressure air into wet walls, behind and under cabinets, and into otherwise inaccessible structural voids. Provides fast, effective drying in all types of assemblies with minimal disruption to materials.

READ AND UNDERSTAND BEFORE OPERATING

⚠ WARNING

CAUTION: Do not alter or modify your Dri-Eaz product in any way. Use only replacement parts authorized by Legend Brands, Inc. Modifications or use of unapproved parts could create a hazard and will void your warranty. Contact your authorized Legend Brands distributor for assistance.

WARNING: This product and other substances that may become airborne from its use contain chemicals, including lead and phthalates, known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to P65Warnings.ca.gov

PREASSEMBLY

Manifold and tubing configurations

Two 200 ft. (60 m) lengths of ⅜ in. (0.375 mm) ID air supply tubing are provided. Use a pair of sturdy scissors or a utility knife to cut the tubing to the lengths as shown in the table below. This combination of two types of manifold configurations can be suitable for many wall drying projects. **Before cutting tubing,** consider if projects typically tend to call for 12 injectors per 7 ft. of wall or 12 injectors per 14 ft. of wall, so you can **assemble in the most commonly-used configurations.**

1. Set up THREE manifolds, each with the lengths of tubing shown (12 injectors along 7 ft. of wall):

Tubing quantity	Tubing length	Tubing locations on manifold nipples
4	4 ft. 1.2 m	Outlets 1, 2, 11 and 12
4	3½ ft. 1 m	Outlets 3, 4, 9 and 10
4	1 ft. 30 cm	Outlets 5, 6, 7 and 8

Fig. A: DRIFORCE AIR DRYING SYSTEM (ADS) COMPONENTS

2. Set up the remaining FIVE manifolds with the lengths of tubing shown (12 injectors along 14 ft. of wall):

Tubing quantity	Tubing Length	Tubing locations on manifold nipples
2	7½ ft. 2.3 m	Outlets 1 and 12
2	6½ ft. 2.0 m	Outlets 2 and 11
2	5½ ft. 1.7 m	Outlets 3 and 10
2	4½ ft. 1.4 m	Outlets 4 and 9
2	2½ ft. 0.8 m	Outlets 5 and 8
2	1 ft. 30 cm	Outlets 6 and 7

To install the tubing, slide one end of the tubing over the manifold outlet nipple and insert an injector in the other end.

ADS Setup

Manifold configuration

Determine the number of manifolds needed for the job. At minimum, inject at 1 injector per stud bay. Use one manifold (each manifold has 12 injectors) for each 14 feet of interior 2 × 4 framed wall. For 2 × 6 exterior framed walls, double-sheeted fire walls, and dense or water-resistant walls, use one manifold (12 injectors) for each 7 feet of wall. Inject at an even greater concentration when saturation is heaviest, and when number of layers is greatest.

Attach ADS vacuum hose air outlet (positive pressure setup) or to the vacuum inlet (negative pressure setup). Tightly seal off the last manifold on each run of ADS with an end-cap plug.

Ensure that all T-connectors, hose, hose cuffs and couplers, manifolds, caps, tubing, and injectors are all firmly connected. Attach the ADS directly to the DriForce blower outlet using a hose coupler.

OPERATING INSTRUCTIONS

CAUTION: Do NOT use the DriForce to extract standing water of any kind. Liquid water drawn in to the blower may damage the motor and void the warranty. Extract standing water with truckmount or portable vacuum extraction equipment before drying.

Preparing assemblies for drying

NOTICE: Do not use pressurized drying setups on walls or other structural cavities that are contaminated. Use HEPA air filtration on every injection project. Particles from the interior of assemblies can become dislodged and affect air quality.

Recommended Tools

Pencil, tape measure, razor knife, drywall taping broad knife, small pry bar, nail puller, screwdriver, carpet awl, drill with 3⁄16 in. bit. An electronic stud finder is also useful.

Walls

Dry inside walls that have been wetted from the bottom up with or without baseboards in place. After inspecting wall layers, insulation, and baseboards, and after evaluating paint finishes and/or wallpaper installations, choose the best method for the customer and situation:

1. Remove baseboard or cove base. To reduce damage to the painted surfaces and make a professional re-installation easier, use a razor knife or other sharp tool to score the paint and/or caulk along the top of the base where it meets the wall. When prying base away from the wall, protect the soft wet wall surface by inserting a drywall broad knife between the pry bar and the wall. Pull protruding nails out of the wall and out of the baseboard. Alternatively, make the wall penetrations immediately at the top of baseboards and dry with the baseboards in place as recommended for a tiled wall base or to save time by eliminating the need to remove, re-match, re-mount and/or replace wooden baseboards.

2. Make air injector access holes. Bore holes into drywall with a carpet awl or use a drill with a 3⁄16 in. bit. Create at least one hole between each set of studs and slightly above the top of the wood or steel base plate of the wall. (Use an electronic stud finder to identify stud locations.)

TIPS: Make the holes as small as possible. Large holes decrease efficiency by leaking air and make hole repair more difficult. To avoid extensive wall/room repainting, place injector holes where baseboard / wall base trim has been removed.

Once the holes are prepared, insert the injectors firmly into the holes you have bored or drilled into the wall, cabinet base or other assembly.

Once drying is complete, fill and repair holes as needed.

Steel Studs. Steel studs are common in commercial buildings. The studs are set in a horizontal channel that can hold large volumes of water. If liquid water is found in these channels, the water must be thoroughly extracted before proceeding. Saturated insulation must also be removed before drying.

Ceilings and Cabinets. Structural ceiling cavities require more air injection points (compared to walls) to dry effectively.

Restorable type wet (wood) cabinets and the structural materials to which they are mounted may be restored by injection at the toe kick, and into walls behind and next to them.

DriForce Airmover Setup

Set the DriForce blower out of high traffic paths to minimize a trip-and-fall hazard from the blower and the ADS.

Plug unit in to a grounded 115V outlet rated for at least 15 amps.

NOTE: Do not use the muffler/filter supplied with the DriForce when using the ADS system. The muffler/filter is not intended to be used on the inlet (vacuum) side of the DriForce.

For additional instructions and important safety information, see the DriForce Owner's Manual.

Drying Process

Positive Air Injection Drying

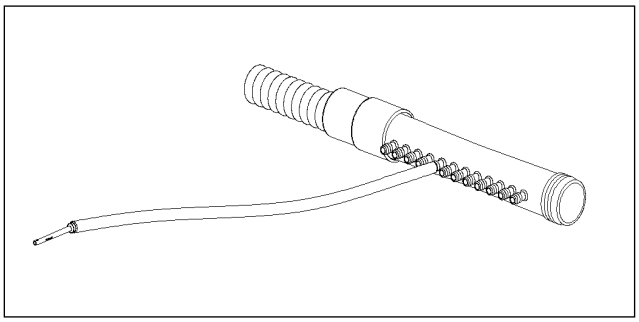
NOTE: Position the dry air outlet of a professional dehumidifier close to the DriForce vacuum inlet. Using Dri-Eaz LGR and desiccant dehumidifiers can accelerate the drying of very wet dense materials and assemblies.

NOTICE: Do NOT tape or seal the dehumidifier outlet ducting to the DriForce vacuum inlet, as this could unbalance the airflow through the dehumidifier and possibly damage the dehumidifier.

TIP: To maximize drying in walls that are wainscoted, tile-covered, multi-layered, or covered with vinyl wall paper or impermeable paint, as well as lath and plaster walls, and firewalls, place additional injectors per linear foot.

OPTIONAL INITIAL PROCEDURE: In cases of deep wall saturation, first connect the ADS to the Vacuum Inlet of the DriForce. Wall interiors will be negatively pressurized and extreme humid air will be evacuated. Continue until the humidity level is no longer changing at Blower Outlet. Then, switch over to Positive Air Injection for the duration of the project.

OPTIONAL: When injection drying wet walls, accelerate drying by making a small vent hole at the highest location where abnormal moisture has been detected in each affected stud bay. Note, however, that an excessive number of vent holes will decrease pressurization and temperature in the cavities.



The ADS connects to the DriForce blower outlet. Tubing runs from the manifold nipples to tubing equipped with injectors that are inserted into a wall or other structural cavity. Each nipple should be occupied with tubing/injectors; any nipples not in use should be blocked off. Tip: Use a short length of tubing to plug off two nipples at a time.

SPECIFICATIONS	
Name	Air Drying System (ADS)
Drying modes	Either positive or negative pressure
Carrying/storage system	2 duffle bags with handle and wheels
Injector hole size	Less than ¼ in. (6 mm)
Crush-proof ADS hose	Thirteen 7 ft. (2 m) sections of 1½ in. (3.8 cm) hose fitted with hose cuffs
Flexible tubing	400 ft. (122 m) of ⅜ in. (0.375 mm) ID tubing
Other parts included:	100 injectors, 8 manifolds (12 nipples each), 4 manifold endcaps, 5 hose couplers, 6 hose clamps, 2 T-connectors, 13 hose assemblies with cuffs, 25 tube extenders

Fig. B: DriForce Airmover