

The tes-timonial

Directed Heat Drying™

October 2008

What's New with TES? The E-TES 120

The E-TES 120 is built in the same housing as the E-TES 240 (current model). It will do everything the 240 model does, but at a slightly slower pace. The E-TES 120 has an average of a 20° heat rise, while the E-TES 240 has an average of a 31° heat rise. Remember that this heat is synergistic; that means that when heat in the room reaches 95°, the recommended temperature setting for the exhaust controller, the temperature coming out of the E-TES 120 would be 115°. Moreover, anytime you contain the heat under plastic or carpet for example, this slows the airflow passing across the heat coil giving it even a higher increase, possibly reaching 140° (a 45° heat rise) coming out the snout.

We are still waiting for E-TES to be listed in Xactimate, but hundreds of restorers are getting \$250 to \$300 per day for E-TES 240. We believe they will be able to get similar rates for the new E-TES 120.

E-TES 120 comes with two 50' 15 amp cords; each cord will use 14.6 amps in start up. Having an E-TES 120 now makes it easier than ever for restorers to use more than one E-TES at a time on a job.

You may be asking yourself why would a restorer buy a regular TES trailer unit with the new E-TES 120 now available?

The answer is power, heat, and income. Compared to the E-TES 120, the TES trailer unit and TEX boxes deliver more than double the heat out-put, utilize very little electricity, generate higher daily rents and dry the job in record time. If you purchased a TES trailer with five TEX boxes, you would get a 50° heat rise (average) out of each TEX without any electricity requirements other than the airmover. Five E-TES 120's would require 10 dedicated 15 amp breakers, plus an additional one for the airmovers while only providing about half the heat.

Part # MB1202, Contractor Price \$2,195



Technical Bulletin: TES & S500 – Part 1

One question that arises when contractors are considering Directed Heat Drying™ is: “Does the IICRC S500 support using this process?” The simple answer is “Yes!,” however, you might want some proof.

This discussion will be a series, since there are so many references to discuss. The following is based on research done by Scott Warrington. It references several sections of the S500.

What Do the Standards say about Heat Drying and TES?

Pages 7 – 88 of the S500 is the “Standard” section. This summarizes what is the “standard of care” in the water damage restoration industry. The standard not only recognizes every one of the principles of drying used by TES, it recognizes the science behind TES, but in many situations, heat based drying systems (also called thermal drying systems in the S500) using negative pressure along with dehumidification by exchange of indoor air with outdoor air is the RECOMMENDED method. When the standard uses the term “recommended” this is the advised or suggested method to meet the standard of care.

The standard section is followed on pages 89-317 by an expanded reference guide. The standard is taken from this reference guide.

Let's look at several of the many examples that prove conclusively that S500 supports direct application of heat and TES. Numbering refers first to the page, then to the section and subsection where this information can be found.

- P. 18 - 4.2.4.4: Temperature control is important to control evaporation rate. Temperature application, modification and control are important basic principles for safe, effective drying.
- P. 20 - 6.1.1: “Restorers should manage airflow to exchange humid air from a space with more favorable air...” This is exactly how TES removes warm, moist air.
- P. 39 - 9.10.8.4.4: When drying wood flooring attempt to reach target humidity of 45% or less. Ambient temperature may be increased to expedite both evaporation and dehumidification. This is precisely what TES does - increases the temperature to expedite evaporation.
- P. 49 - 12.1.11: Ventilating the structure may be an effective way to reduce the build up of excess humidity. Of course, TES set-up normally uses ventilation to reduce humidity.
- P. 51 - 12.1.20: Controlling airflow increases evaporation. Note the third bullet point – Means to increase the rate of evaporation include increasing air or surface temperature.
- P. 52 - 12.1.22: “Controlling Temperature to Accelerate Evaporation - ...the temperature of the wet materials themselves impacts the rate of evaporation significantly. Water in its vapor phase (gas) has much higher energy than water in its liquid phase. Therefore significant energy is required for evaporation. ...”
- P. 52 - 12.1.23: “Applying Heat Directly to Materials - ... thermal energy transfer and other systems employing direct heat application can be used to increase the temperature of wet materials.... Additional direct heat can accelerate drying of wet materials, especially, dense, less-permeable materials.”



TES-timonial: Brad Ayers, Chem-Dry of Brazos County

"We used our E-TES for the first time last week. We have had a TES system since Feb 2006. When we saw the E-TES in a flyer, we knew we had to have it to add to our restoration services.

"We got a call on a two story condo, toilet valve let go in the second floor bathroom. Naturally the water went from upstairs to downstairs. The sub-floor upstairs was wet about one third across, including all the walls near the bathroom and the downstairs master bedroom & bath.

"We depolyed TES downstairs and E-TES upstairs. In about 10 hours the carpet and pad was dry upstairs and the sub floors still had some to go. At 24 hours, we moved the E-TES from a direct containment to a regional containment to better dry out a few other areas that were still wet.

"At 34 hours we still had one "hot spot" in the subfloor upstairs. We moved the E-TES directly in front of the area and in about 3.5 hours we went from 17.6% WME to roughly 9.6% (this area was approx. 3'x3'). The downstairs was dry as well. The entire job was roughly 38hrs total drying time. We charged the E-TES out at \$275/day (\$250 E-TES and \$25 airmover). This job we also setup exhaust controller in the upstairs and down stairs, both were set at 95°F; with a 5° differential.

"The E-TES unit is really great unit for smaller areas to dry rapidly.

"With the addition of this unit, the smaller jobs we have doing conventionally will be faster and dryer quicker for our customers to get back to normal."

Upcoming Seminars & Events

Date	Event	Host	Location	Registration Info	Contact
October 01	tes Seminar 8:00 am to 12:00 pm	Cleaner Solutions an InterlinkSupply Distributor	Springdale, AR	479-927-1677	Rob Dulac
October 02	tes Seminar 8:00 am to 12:00 pm	Cleaner's Closet an InterlinkSupply Distributor	Glen Burnie, MD	800-477-1102	Mike Wheatley
October 02	tes Seminar 8:00 am to 12:00 pm	InterlinkSupply of Denver	Denver, CO	800-743-2391	Guy Allen
October 03	tes Seminar 8:00 am to 12:00 pm	InterlinkSupply of Colorado Springs	Colorado Springs, CO	800-281-7393	Guy Allen
October 03	tes Seminar 8:00 am to 12:00 pm	The Cleaner's Closet an InterlinkSupply Distributor	Richmond, VA	888-743-8690	Mike Wheatley
October 07	tes Seminar 8:00 am to 12:00 pm	InterlinkSupply of Seattle	Tukwila, WA	866-320-8244	George Cazares
October 07	tes Seminar 8:00 am to 12:00 pm	CleanSource in Columbia an InterlinkSupply Distributor	Columbia, SC	800-457-0102	Herb Stutts
October 08	tes Seminar 8:00 am to 12:00 pm	CleanSource in Charlotte an InterlinkSupply Distributor	Charlotte, NC	800-292-3309	Herb Stutts
October 09	tes Seminar 8:00 am to 12:00 pm	The Cleaner's Closet an InterlinkSupply Distributor	Virginia Beach, VA	800-477-1102	Mike Wheatley
October 10	tes Seminar 8:00 am to 12:00 pm	The Cleaner's Closet an InterlinkSupply Distributor	Lorton, VA	800-996-1540	Mike Wheatley
October 14	tes Seminar 8:00 am to 12:00 pm	Sierra Cleaning Systems an InterlinkSupply Distributor	Sparks, NV	888-852-8526	Amy Hagen
October 15	tes Seminar 8:00 am to 12:00 pm	Central California Cleaning Supply an InterlinkSupply Distributor	San Diego, CA	877-271-9988	Joe Marin
October 16	tes Seminar 8:00 am to 12:00 pm	Central California Cleaning Supply an InterlinkSupply Distributor	Fullerton, CA	800-538-9276	Shawn or Felix
October 17	tes Seminar 8:00 am to 12:00 pm	The Cleaning Source an InterlinkSupply Distributor	Las Vegas, NV	702-387-9625	Shawn or Rick
October 22	tes Seminar 8:00 am to 12:00 pm	InterlinkSupply of Tempe	Tempe, AZ	800-720-0221	Dean or Rich
October 28	tes Seminar 8:00 am to 12:00 pm	Barker-Hammer an InterlinkSupply Distributor	Edina, MN	952-926-7117	Kevin Turner
October 29	tes Seminar 8:00 am to 12:00 pm	Great Lakes Steamway an InterlinkSupply Distributor	Wayne, MI	734-722-0168	Garry Moyer

To view the complete calendar of events, visit us online at

<http://www.tesdryingsystem.com/events.html>

You may also contact the **tes hotline** at (800) 948-1754.