Project Case History

Condo owner slashes clothes drying time and dangerous lint build up with Dryer Duct Booster®

The problems: 120 equivalent feet of dryer duct caused increased drying time and energy waste, occassional tripping of the dryer's thermal heat limit and excessive lint build up—a fire hazard.

The solution: Tjernlund's Dryer Duct Booster® was installed to maintain proper exhaust velocity which significantly reduced drying times, energy consumption and minimized lint build up.

Eastbank Condominiums, North Hudson, WI

Homeowners were fed up with excessively long clothes drying times plus lint and dust that built up in the dryer duct and permeated their home's interior. Being employed in the insurance industry, they knew that long dryer duct runs can increase lint build-up in duct-work creating a potential fire hazard. Therefore, they had their dryer duct cleaned periodically and frequently knocked on it with a broom handle to loosen the lint. However, these maintenance practices proved insufficient.

Interior clothes dryer duct runs included many elbows and an excessive linear duct length

Besides lint showing up inside their home, reduced air flow caused a thermal heat limit on the dryer to trip periodically, opening the "heat circuit" so the dryer would run without heat. Drying could not continue until the limit was cooled enough to safely allow the "heat circuit" on.

Safety, increased energy use as well as the frustration from repeatedly going downstairs to find the load still wet motivated the homeowners to find a permanent solution to the problem.

Pre-Dryer Duct Booster® Installation Ducting Configuration:

The dryer duct run consisted of thin walled aluminum flex duct in the interior mechanical room with many elbows, bends and sags between the duct hangers. The duct run through the garage utilized expandable aluminum corrugated pipe and was approximately 20' long. There were a total of seven 90 degree

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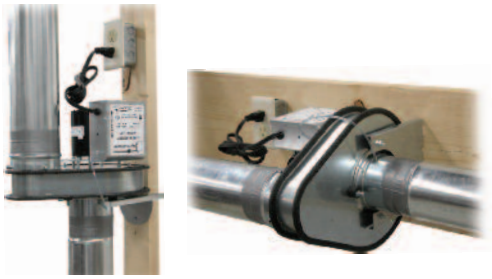
Exterior duct run with Dryer Duct Booster® installed in the garage. Duct was changed out from corrugated aluminum flex duct to rigid metal duct.

elbows and five 45 degree elbows plus approximately 39 straight feet of duct.

Considering that one 90 degree elbow equals six straight feet and one 45 degree elbow equals three straight feet, there was approximately 96 equivalent feet of duct on the dryer run. What's more, the resistance of corrugated duct, versus straight non-corrugated metal duct, increased the total equivalent feet of duct to 120 feet. Most dryer manufacturers allow a maximum of 25 equivalent feet of duct.



Dryer Duct Booster® can be installed in horizontal or vertical duct runs. Mounting bracket also allows Dryer Booster to be rotated 360 degrees for installation flexibility.

DRYER DUCT BOOSTER® INSTALLATION & RESULTS

The homeowners installed a Tjernlund in-line Dryer Duct Booster® fan and also changed aluminum flexible corrugated duct runs in garage over to rigid metal duct to bring the total equivalent duct length under 100 feet. They were impressed with the Duct Booster's construction, superior engineering, quietness plus ease of installation—which only took 15 minutes! During the initial startup, increased exhaust velocity created by the Duct Booster dislodged a large amount of lint trapped in the duct and forced it out the exterior vent.

The homeowner's concern about a potential dryer duct fire has been greatly reduced thanks to the high pressure and non-clogging features of the Dryer Duct Booster®.

The nuisance of repeated trips to the laundry room to extend drying time has been eliminated and drying times have been reduced by over 40% contributing to energy savings and lower utility bills.