



GRADING SPACES LLC



HOME INSPECTION & PERFORMANCE ANALYSIS

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Service: Blower door test

Date: Aug 19, 2008

Client: Chimney Balloon USA

Description:

Open chimney flues are a common source of energy loss in many homes, both while a fire is burning as well as when it is left unused.

Air sealing, along with properly insulating a home's building shell, is one of the most cost effective way to keep heated (or cooled) air inside a structure, thus yielding energy savings and increased comfort. Chimney flues, however, are often not addressed during this work. This house was tested to assess the effectiveness of the Chimney Balloon product in sealing off this potentially large hole in the building shell.

The house was depressurized to -50 pascals (with respect to the outside) at each condition using a blower door and the flow reading noted.

Results:

	Fireplace condition	cfm/50 reading
	Fireplace damper open, doors open	1720
	Fireplace damper open, doors closed	1323
	Fireplace damper closed, doors open	1470
	Fireplace damper closed, doors closed	1280
	Chimney balloon installed	1250

These results show that the chimney balloon achieved an overall improvement of 27% from the worst case “all open” condition. The damper and doors on this fireplace were in good condition and worked relatively well, however, many chimneys and their components I inspect are not in as good condition as these, so the contribution of the damper and/or doors to air sealing will often be much less.

Conclusion:

After conducting this test I feel that the Chimney Balloon is an easy and effective way to reduce a home’s air infiltration rate. While this is not the only factor that affects how well a house performs, any reduction in it will translate into some improvements in comfort and efficiency.

Where appropriate, I will certainly be recommending the use of a Chimney Balloon as part of my comprehensive energy evaluations.

Regards,

A handwritten signature in black ink, appearing to read 'Mark Furst', with a stylized, cursive script.

Mark Furst