

# FOLDING ATTIC STAIRS

By  
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When I reach the second floor of a home during a home inspection, I feel fortunate when I find a set of folding attic stairs present as I won't have to carry a step ladder up one or two flights of stairs. However, my very next thought is about the folding stairs being "another accident waiting to happen!" Over the years, I have found that thousands of folding stairs have at least one or more potential fall hazards and I believe that these stairs have caused more personal injuries to home inspectors than any other problem.

I am sure that every home inspector has had some "close calls" and has learned that the vast majority of folding attic stairs exhibit safety deficiencies. One of the scariest war stories that I remember occurred when I pulled a set of folding stairs down and one of the springs broke and went sailing past the broker's head like shrapnel and hit the wall at the far end of the hallway. Just imagine what would have happened if that spring had struck someone? Since that episode, I make it a habit to caution those present to "stand aside, out of the line of fire."

My experience as a home inspector has taught me that spending money on a set of quality folding attic stairs does not seem to be a priority to most builders and do-it-yourselfers. As a result, cheap stairs, amateur installations, insufficient installations, and neglected maintenance all combine to expose a home inspector to potential personal injury and property damage claims. Tradesmen simply do not realize the seriousness of their negligence. Therefore, safety must be in the back of your mind during each inspection.

The requirement to document the potential safety hazards that a set of folding attic stairs pose for the user and the need to document "unsafe conditions" represent one more land-mine that every home inspector must heed.

I urge that you develop a field practice that includes a close inspection of the folding stairs prior to "pulling the string," and prior to climbing the stairs. Begin by using your flashlight to examine the ceiling, cord and staircase cover. If you see a latch or hasp holding the folding staircase in the closed position, be especially wary. More than likely, the springs are defective and no longer counterbalance the weight of the staircase. You should give such a scenario a second thought as releasing the fastener may result in the entire thing falling down on top of you. If you are able to partly open the folding stairs, STOP. Take a moment to check the hardware for loose connections for most folding stairs have loose bolts, missing bolts, missing nuts, loose nuts and loose hinges – meaning the whole thing may just fall apart and "you own it!"

The spring arms may be retracted in the wrong position requiring you to bend them into proper alignment in order to unfold the stairs. Take a moment to consider if the base of the folding stairs is cut to align with the floor and whether or not the finish on the floor covering is at risk of damage. If you notice a gap between the top and middle sections of the stairs this means the bottom stringers were not cut correctly and that safety repairs are needed. Check each tread, all hardware and the handrail for defects and then use your judgment before climbing the stairs. With a flashlight in one hand or the attic light on, inspect the sides and headers of the staircase to make sure that they are securely fastened to the framing and that the roof frame has not been inappropriately altered.

Consider your own safety first, but don't forget to remind the client not to follow immediately behind you as the stairs may not support the additional weight. If you find the folding stairs to be unsafe, be a professional and say so. Don't use the folding stairs, and make the safe choice of going back to the truck to get your own step ladder. Better safe than sorry!

Have you ever been preoccupied with examining the roof frame from inside the attic and almost fallen into the open folding staircase? I caution my client about moving stored goods within the attic and accidentally falling into the stairwell. I even advise that a gallery railing be constructed around the opening.

The physical location of the stairs can also be a problem. Be especially cautious of a folding staircase that opens over another staircase as the risk of injury increases dramatically. I have even found folding attic stairs installed as a means of egress from a living space.

In other instances, home owners often install a set of folding stairs in an attached garage in order to gain access to a loft used for storage purposes. In doing so, the staircase selected frequently lacks required fire shielding, thus voiding the garage fire shield and placing the home at risk of rapid fire spread.

When folding stairs are installed in the second floor hallway just outside of the bathroom door, and the folding stairs lack weatherstripping and insulation, a chase is created that allow heat loss and the migration of excessive moisture from the bathroom into the attic. The folding stairs may provide easy access to the attic, but they can also represent one of the biggest holes in the thermal barrier between the attic and conditioned space, wasting energy dollars and contributing to mold problems in the attic. A home inspector should advise that folding stairs be latched tightly, weatherstripped and insulated with a rigid ½" or ¾" rigid foam box that easily pushes up out of the way when access is needed.

Closing the folding stairs can be just as dangerous as opening them. The stairs may be stuck in the open position, requiring you to pull the spring arms toward you to

enable them to bend. Sometimes the spring arm assembly will cause the folding stairs to close before you have time to fold up the stairs requiring three arms and one foot to prevent catastrophe. I suggest that you get into the habit of always keeping one hand on the stairs when opening or closing them and never let the stairs slam shut or you may damage the stairs, damage the ceiling or cause a personal injury.

To summarize, folding attic stairs are a great convenience but they also can represent a clear and present danger to the home inspector and the home owner if they are defective. Moreover, the folding stairs may allow costly heat loss, moisture migration, mold formation and the rapid spread of fire. Folding attic stairs are just one more component in the home that every home inspector must evaluate and document in order to stay healthy, wealthy and wise.

For further information on insulating folding and installing folding stairs, visit the following web sites:

<http://www.southface.org/home/sfpubs/miscpubs.html>

<http://membersites.namezero.com/mtyrol.aol.com/id13.html>

<http://www.growinglifestyle.com/article/s0/a85085.html>

Be advised that certain folding attic stairs have also been recalled:

<http://www.cpsc.gov/CPSCPUB/PREREL/PRHTML98/98132.html> Davidson Ladder

<http://www.cpsc.gov/CPSCPUB/PREREL/PRHTML97/97144.html> Werner Sliding Attic Ladder

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