



## RETROFIT INSTALLER TECHNICIAN Field Guide

### Handle Materials/Equipment according to manufacturer specifications

Candidate displays their understanding of manufacturer's specs  
Candidate mentioned the need for an MSDS for every material being used or stored at the project site  
Candidate mentioned that tools should be handled per manufacturers specifications

### Handle tools according to manufacturer specifications

Candidate mentioned need for manufacturer's specs and how they pertain to tools being used/stored  
Candidate displayed proper handling of tools on props  
Candidate displayed proper use of tools on props

### Set up tools

Candidate demonstrated ability to properly unload tools  
Candidate demonstrated the ability to properly plug in a power tool  
Candidate demonstrated the ability to properly connect attachments to tools

### Set up materials

Candidate demonstrated ability to unload materials  
Candidate demonstrated ability to organize materials  
Candidate demonstrated the ability to maintain the integrity of materials

### Implement safety protocol (rigging, ventilation, blocking)

Candidate mentioned the need for ventilation in confined spaces  
Candidate mentioned the need to hook up to fall protection when applicable  
Candidate put on appropriate PPE  
Candidate inspected work area for potential hazards

### Use protective barriers (drop cloths)

Candidate placed drop cloth in appropriate area (or sited safety concerns for not doing so)  
Candidate mentioned the need to obtain permission to move personal objects (e.g. furniture, etc)  
Candidate explained the need to work following lead safe work practices when appropriate

### Protect exterior environment

Candidate displayed methods to control debris created during retrofit activities  
Candidate discussed methods to protect landscaping during retrofit activities

### Verify access to work areas

Candidate moved any obstructions prior to beginning any work

### Clean as you go (organize)

Candidate cleaned and returned tools to central area  
Candidate picked up unused material and returned it to a central area  
Candidate mentioned the need to return belongings (e.g. furnishings, etc)  
Candidate cleaned the work area

### Address deviations from work scope

Candidate identified need to check for deviations from the workscope  
Candidate identified need to report any deviations from the workscope

### Install air sealing measures - These Props are Single Attempt Only

#### **Large Opening Prop**

Candidate identified leaks and bypasses on the prop  
Candidate selected appropriate materials for prop  
Candidate displayed ability to seal gaps and cracks  
Candidate checked that the seal is complete  
Large Opening prop smoke test - test the prop with smoke to verify seal

#### **Large Opening with Heat Source Prop**

Candidate identified leaks and bypasses on the prop  
Candidate selected appropriate materials for the prop  
Candidate selected appropriate sealant for the prop  
Candidate displayed ability to seal gaps and cracks  
Candidate checked that the seal is complete  
Candidate looked for potential fire code violations  
Large Opening with Heat Source prop depressurized - test the prop with smoke to verify seal

#### **Install loose fill insulation**

Candidate properly set up machine for loose fill installation  
Candidate mentioned air sealing is complete – as confirmed on other props  
Candidate installed insulation dams around hatch (window hole)  
Candidate used proper technique when blowing the insulation  
Candidate installed 6 inches of insulation evenly

#### **Install or patch moisture barriers**

Candidate properly installed moisture barrier with sealed overlapping seams  
Candidate mentioned the need to identify and locate moisture sources  
Candidate mentioned the need to report bulk moisture concerns

#### **Rough in mechanical ventilation systems**

Candidate appropriately prepared the fan for installation (unbox, verify all components are available)  
Candidate correctly cut openings in building (rough opening not to exceed 1/4" per SWS)  
Candidate correctly installed ventilation system components  
Candidate correctly installed ventilation system duct and termination  
Candidate correctly insulated ducting system

#### **Install dense pack insulation**

Candidate properly set up machine for dense pack installation  
Candidate checked for access to all cavities  
Candidate checked for any horizontal blocking  
Candidate filled first cavity and confirmed density stops air leakage (proctor tests for smoke movement)  
Candidate readjusted the insulation machine if needed  
Candidate correctly filled remaining cavities  
Candidate compared material use to coverage required (bags consumed calculation)  
Proctor must smoke test remaining cavities (2). Prop passes with no smoke movement in either cavity under depressurization

#### **Install windows and doors**

Candidate prepared opening for window installation  
Candidate correctly installed window  
Candidate properly air sealed around window  
Candidate mentioned the need to verify flashing is installed  
Candidate properly installed door  
Candidate correctly attached weatherstrip to the frame  
Candidate correctly attached sweep on door  
Candidate made note that if home were built prior to 1978 they would have to work in a lead safe manner

#### **Pick-up tools and materials**

Candidate took inventory of tools and materials used  
Candidate cleaned and stored tools and materials for final cleanup

#### **Clean up and close out**

Candidate picked up any protective barriers used  
Candidate properly contained and disposed of materials and waste  
Candidate cleaned work area  
Candidate made note of the need to restore occupant belongings