

Advisory: Personal Protective Equipment: Addition of Alternate Level 3

**Applies to: Health & Safety Guidelines for In-Premise and Customer-Facing
Energy Efficiency Audits and Upgrades**

**Applying to: Residential (1-4 Units) Buildings
Commercial & Industrial Buildings
Multifamily Buildings (5+ Units)**

Description: The current requirements for Level 3 Personal Protective Equipment (PPE) include wearing an N95 respirator mask or higher level of respiratory protection. These masks require medical clearance and fit-testing before they can be worn on the job. At this time, the following issues are causing delays in meeting this Level 3 requirement:

- NIOSH-certified N95 masks are very difficult to procure because of high demand by the medical community for use during the continuing pandemic.
- KN95 masks, which are made in China and intended to be equivalent of N95 masks, are also in high demand. These masks are not certified by the National Institute for Occupational Safety and Health (NIOSH). Based on testing, the U.S Food and Drug Administration (FDA) has authorized use of certain brands of these masks from a restricted group of Chinese manufacturers. However, NIOSH has indicated there are numerous cases of masks being counterfeited and branded as being from legitimate Chinese manufacturers.
- The materials for fit-testing are now also in short supply.

Since many vendors may likely be impacted by these shortages, and considering that energy efficiency contractors are ready to restart field work imminently or immediately, Table 1 of the Health & Safety Guidelines (on the following page) has been modified to include “Alternate Level 3” provisions, which still provide highly effective respiratory protection. These alternatives do not replace the existing Level 3 specifications, but provide another pathway for vendors to resume work safely if the shortages noted above are delaying their activities.





Table 1: Personal Protective Equipment Levels				
Required PPE	Level 1	Level 2	Level 3	Alternate Level 3
Long Pants <i>NOTE: In warm weather, shorts may be worn under coveralls.</i>	X	X	X	X
Closed-toe Shoes	X	X	X	X
Coveralls (Tyvek® or other lighter-weight material) <i>NOTE: If wearing other full-body protection (e.g., fire-resistant suit), coveralls are not necessary.</i>		X	X	X
Tight-fitting Gloves (see below for exception)	X	X	X	X
Cut-resistant utility gloves over tight-fitting gloves <i>NOTE: If snug-fitting, cut-resistant gloves provide adequate skin barrier (e.g., electrician's gloves), under-gloves are not necessary.</i> <i>NOTE: Utility gloves may be removed temporarily, if wearing tight-fitting under-gloves, when a task requires enhanced dexterity or touch.</i>		X	X	X
Cloth Mask or Dust Mask (See Table 3)	X	X		
*Dust Mask or Surgical Mask (See Table 3)				X
*N95 Mask or Equivalent or Greater Protection (e.g., N100, P100, cartridge-type) (See Table 3)			X	
Face Shield, Safety Glasses, or Safety Goggles			X	X
Cut-resistant utility gloves over tight-fitting gloves <i>NOTE: If snug-fitting, cut-resistant gloves provide adequate skin barrier (e.g., electrician's gloves), under-gloves are not necessary.</i> <i>NOTE: Utility gloves may be removed temporarily, if wearing tight-fitting under-gloves, when a task requires enhanced dexterity or touch.</i>		X	X	X
* Facial hair on workers should be limited to very minimal growth to ensure a close fit of the required masks for Level 3 and Alternate Level 3. If workers elect to have more substantial facial hair that may lessen close fit of those masks, they would be limited to performing only those tasks permissible wearing Level 1 or Level 2 PPE.				

Face shields, safety glasses/goggles, surgical masks, and dust masks appear to be in adequate supply for procurement.

Physical distancing allowed between workers wearing Alternate Level 3 PPE is the same as for workers wearing Level 3 PPE. Table 2 of the Guidelines has been modified accordingly.

Table 2 Allowed Physical Distancing for Different PPE Levels				
	Level 1	Level 2	Level 3	Alternate Level 3
Minimum Physical Distance between workers if wearing similar PPE. Worker wearing lowest level PPE determines minimum physical distance <i>NOTE: These are <u>estimated</u> distances based on protection provided by PPE. Workers should try to maintain a 6-foot physical distance if possible.</i>	6 feet	4 feet	2 feet	2 feet

Face masks specified in Table 1 should meet the following criteria:

Table 3 Face Mask Types and Criteria			
Cloth Mask	Dust Mask	Surgical Mask	N95 and Other High Efficiency Masks (examples)
			 N95 N100 Cartridge respirators
<ul style="list-style-type: none"> -- Fits comfortably and snugly against face -- Held with ties or elastic -- More than one fabric layer -- Washable, reusable 	<ul style="list-style-type: none"> -- Rigid material to hold shape -- Seals around nose, mouth, and chin -- Adjustable nose piece -- Disposable 	<ul style="list-style-type: none"> -- At least 3-ply -- Pleated for coverage of nose, mouth, chin -- Adjustable nose piece -- Ear loops, elastic bands, or cloth ties -- Disposable 	<ul style="list-style-type: none"> -- Require medical clearance and fit-testing -- Require training on donning, doffing, seal checks. -- N95 is disposable, others are reusable after disinfection