

# TCR 37 – MERV Filters

#### **Effective date:**

March 1, 2021

## Applicable to the following property types:

Office (03.04.01)
Universal (03.04.01)
Enclosed Shopping Centre (03.04.01)
Light Industrial & Open Air Retail (03.04.01)

### **Resolution Details:**

Language surrounding MERV filter use and replacement has been further refined in the following way:

- Reference to "Addendum B" has been removed. The optional testing of the performance loss for MERV
  was introduced in 2008 in the Addendum B of the then active ASHRAE Standard 52.2-2007. The standard
  has since been updated twice, and the content of the Addendum was integrated in the updates. The
  optional test was not modified, and it remains published as the Appendix J.
- Additional language has been added requiring that MERV filters operate at their expected efficiency. To demonstrate compliance:
  - Provide evidence of the MERV filter rating (e.g. via inventory list, product box)
  - Provide evidence of the agreed upon change-out point, based on either pressure drop or time as agreed to by the Building Manager; AND
  - Provide preventative maintenance logs in the Preventative Maintenance Program to show that the filters are being replaced at the agreed intervals.
- Details have been added on the verification of MERV-A filters. To demonstrate compliance, applicants must provide the test report from the manufacturer or supplier showing all the following:
  - The MERV rating (e.g. via inventory list, product box)
  - The MERV-A efficiency testing results
  - Attestation that the test has been conducted "as per ASHRAE 52.2 standards"
  - o Company stamp or signature from the testing organization (can be manufacturer or supplier)

## New question wording (changes are marked in red):



03.04.01	What MERV filters are in use for all outdoor air and return air (i.e. circulating air) systems?	
Explanation & Evaluation	<u>Description:</u> Filtration of return-air (from systems such as compartment units, fan-coil units, heat pumps) prevents recirculation of occupant-generated contaminants. Use of MERV 8 or greater filtration systems significantly reduces levels of indoor contaminants and prevents build-up of particulate and debris on HVAC components.	
	ASHRAE recommends the use of MERV 8 filtration at a minimum for commercial environments.	
	Requirements: All filters must be rated as per ASHRAE 52.2 (latest edition).	
	Filters must be installed and replaced at or before the pre-determined pressure drop or timeframe, not exceeding the in accordance with manufacturer's specifications and ASHRAE Standard 180 (Maintenance Standard). To demonstrate compliance:	
	<ul> <li>Provide evidence of the MERV filter rating (e.g. via inventory list, product box); AND</li> <li>Provide evidence of the agreed upon change-out point, based on either pressure drop or time as agreed to by the building manager; AND</li> <li>Provide preventative maintenance logs in the Preventative Maintenance Program to show that the filters are being replaced at the agreed intervals.</li> </ul>	
	Additional points are awarded if the filters maintain their MERV rating when tested in accordance with ASHRAE 52.2 Addendum B, Appendix J. To demonstrate compliance, provide the test report from the manufacturer or supplier showing all the following:	
	<ul> <li>The MERV rating; AND</li> <li>The MERV-A efficiency testing results; AND</li> <li>Attestation that the test has been conducted as per ASHRAE 52.2 standards; AND</li> <li>Testing company signature or stamp and date.</li> </ul>	
	Additional Information: Installation of filtration systems that meet ASHRAE Minimum Efficiency Reporting Value (MERV) 8 will prevent larger outdoor air contaminants such as mould spores, pollen, some dusts and aerosols from entering the HVAC system.	
	Installation of filtration systems that meet ASHRAE Minimum Efficiency Reporting Value (MERV) 13 to 16 prevent up to 90% of fine outdoor air contaminants such as mould spores, pollen, dusts and aerosols from entering the HVAC system.  If a combination of filters is used, select the highest MERV rating representative of at least 50% of all filters. Select Not Applicable if all HVAC systems are owned, managed and maintained solely by tenants.	
Scoring	MERV 7 or below	0/15
	MERV 8-12	8/15
	MERV 8-12 (ASHRAE 52.2, Addendum B, Appendix J)	10/15
	MERV 13-16	13/15
	MERV 13-16 (ASHRAE 52.2, <del>Addendum B,</del> Appendix J) N/A	15/15 0/0
	IV/M	0,0