

## Air Tightness Testing Required for Different Building Types: City of Fort Collins Building Code

New Construction Building Types	Single Family Detached 	Single Family Attached 	Multi-family – stacked units (low-rise and high-rise) 	Small Commercial (≤5,000 sf) 	Large Commercial (>5,000 sf) 	Commercial / Residential Mixed Use 
<b>Examples</b>	Houses that are free of any shared walls and stand alone	Duplex, triplex, town-homes, row-houses. Each unit has its own foundation and roof (including IBC R2, R3)	Stacked apartments or condos (to include high-rise projects built under the IBC)	Small office buildings, offices adjacent to unconditioned space	Large multi-story office buildings, large multi-use buildings	Retail on street level, MF stacked units above
<b>Test Required</b>	Residential Air Tightness Test	Residential Air Tightness Test	Multifamily Unit Air Tightness Test	Small Commercial Building Alternative Air Barrier Test	Large Commercial Building Air Leakage Test	Large or Small Commercial Building Air Leakage Test & MF Unit Air Tightness Test
<b>2018 Amended Code Reference</b>	IECC R402.4.1.2 IRC N1102.4.1.2	IECC R402.4.1.2 IRC N1102.4.1.2	IECC R402.4.1.2 (effective 8/1/2014)	IECC C402.5	IECC C402.5	IECC C402.5 and IECC R402.4.1.2
<b>Minimum Tester Qualifications</b>	RESNET Rater, BPI Building Analyst	RESNET Rater, BPI Building Analyst	RESNET Rater, BPI MF Auditor or Building Analyst, LEED-H MF Auditor	RESNET Rater, BPI Building Analyst	Approved Large Commercial Building Air Leakage Testing Agency	RESNET Rater, BPI MF Auditor or Building Analyst, LEED-H MF Auditor
<b>Compliance Metric (Leakage not to exceed)</b>	3 ACH50	3 ACH50	0.30 CFM50/SF unit enclosure surface area (SA)	0.25 CFM50/SF building envelope surface area (SA)	0.25 CFM75/SF building envelope surface area (SA)	0.25 CFM50/SF SA for small commercial space. 0.25 CFM75/SF for large commercial. 0.30 CFM50/sf for MF units above
<b>Test Submittal Requirements (to Building Dept. for C.O.)</b>	See Protocol for information to be included in report	See Protocol for information to be included in report	See Protocol for information to be included in report	See Protocol for information to be included in report	Certification of Compliance, Building Air Leakage Test Results	See Commercial and MF Protocols for information to be included in report
<b>Compliance Protocol or Guide</b>	CFC Building Code Air Tightness Testing Protocol, New Attached and Detached SFD	CFC Building Code Air Tightness Testing Protocol, New Attached and Detached SFD	CFC Building Code Protocol for New MF Building Air Tightness Testing	CFC Alternative Small Commercial Building Air Barrier Testing Protocol	CFC Building Air Leakage Test Protocol. CFC Commercial Air Barrier Fact Sheet	CFC Building Code Protocols for Air Tightness Testing: Large or Small Commercial, and MF