

# BCBC DUCT SIZING - SINGLE DUCT

for design and performance of residential ventilation systems to BCBC 2018 - 9.32

<b>1. Design Condition</b> Location: _____ Design Airflow: _____ cfm    ESP: _____ " w.c.  Length + Hood + (# Elbows × 10 ft) = Equivalent Length _____ ft + 33 ft + ( _____ × 10 ft) = _____ ft	<b>2. Equipment</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%; text-align: center;">Principal Fan</td> <td style="width: 33%; text-align: center;">Supplemental Fan</td> </tr> <tr> <td style="text-align: center;">HRV/ERV</td> <td style="text-align: center;">Exhaust Fan</td> <td style="text-align: center;">Inline Fan</td> </tr> <tr> <td>Make: _____</td> <td></td> <td></td> </tr> <tr> <td>Model: _____</td> <td></td> <td></td> </tr> <tr> <td>Equipment Rated Airflow: _____ cfm @ _____ " w.c.</td> <td></td> <td></td> </tr> </table>		Principal Fan	Supplemental Fan	HRV/ERV	Exhaust Fan	Inline Fan	Make: _____			Model: _____			Equipment Rated Airflow: _____ cfm @ _____ " w.c.		
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### BCBC Duct Sizing Table 9.32.3.8.(3) (Imperial Conversion) - For Reference

		Maximum Equivalent Duct Length <sup>(1)</sup> , ft Table 9.32.3.8.(3)					
Equivalent Diameter, inches	Cross Section Area, in <sup>2</sup>	Fan Capacity, CFM					
		50	80	100	120	140	160
<b>Flexible Duct</b>							
5	20	105	49	-	-	-	-
6	28	151	131	92	59	43	-
7	38	151	151	151	151	151	79
8	50	151	151	151	151	151	151
<b>Rigid Duct</b>							
4	13	105	49	-	-	-	-
5	20	151	131	92	59	43	-
6	28	151	151	151	138	112	79
7	38	151	151	151	151	151	151

Notes: 1. The equivalent length of a duct is the length of the duct plus 33 ft for the exterior hood and 10 ft for each 90° elbow.

Prepared By: _____	HRAI #: _____	Location: _____
Signature: _____	Date: _____	Official Use: _____

