



Clark County Department of Building & Fire Prevention

Building Division – Inspection Services

Field Inspection Guideline

SUBJECT:	Combustion Air Using Infiltration for Water Heaters in Garages	FIG-P-007	
Effective Date:	May 4, 1998	Revised: April 11, 2007	Approved By: GJF
Code Chapter:	2006 UPC Section 507.2		Page 1 of 1

Interpretation:

Section 507.2 - Indoor combustion air. Air provided through openings other than specific combustions air openings may be used, including such openings as those around vehicle access garage doors. The method to be used is the “standard method” outlined in Section 507.2.1.

Field Application:

Take the sum of all the gas fired appliances input ratings that are located in the garage and the available room volume using the formula of 50 cubic feet per 1000 Btu’s.

Example: Garage size = 25’ X 25’ X 8’ = 25’ X 25’ = 625 square feet X 8 feet in height = 5,000 cubic feet, ÷ 50 = 100 X 1000 = 100,000. Appliances equaling 100,000 Btu’s can be installed in this room using “Indoor Combustion Air” or “Infiltration”.

Note: An easier way to calculate is by using the 1/20 rule:

Example: Garage size = 25’ X 25’ X 8’ = 5000 c.f. Taking your cubic feet and multiplying that sum by 20 = 100,000 Btu’s, that can be installed in this size room. To check your answer, take the 100,000 ÷ by 20 = 5000 or your cubic feet in the room.