

**Engineering Firm
Letterhead**

Castle Rock Fire and Rescue Department
300 Perry Street
Castle Rock, CO 80104

Date

RE: Confirmation Memo of Required Fire Flow

To Life Safety Division,

Please accept the following required fire flow evaluation(s) based upon the currently adopted 2012 International Fire Code for review and confirmation for each of the following proposed buildings.

**Building Name
Building Address**

Total Fire Flow Calculation Area: ###-square feet
Building Construction Type: ###
Are fire sprinklers provided throughout this building? **YES/NO**
Are you proposing a reduction in Required Fire Flow for fire sprinklers? **YES/NO**
Are Fire walls provided in this building? **YES/NO**

Reference Appendix B, Table B105.1
Required Fire Flow: ###-gpm at 20-psi
Flow Duration: ###-hours
If applicable, Calculated Fire Flow including reduction for sprinklers: ###-gpm at 20-psi
Flow Duration: ###-hours

Reference Appendix C, Table C105.1
Required Number of Fire Hydrants: ###
Maximum Average Spacing: ###
Maximum Distance from Fire Hydrant to Building: ###-feet, as a fire truck would drive
(Note in sprinkled buildings, a hydrant shall be located within 100-ft of the FDC)

Design Engineers Signature: _____ Date: _____

The determined Required Fire Flow, Number of Fire Hydrants and Hydrant Spacing as shown above satisfy the fire protection requirements of the Castle Rock Fire and Rescue Department.

Final fire hydrant placement will be determined and approved during the Site Development (SDP) and/or Construction Document (CD) review phase.

Castle Rock Fire Signature: _____ Date: _____

Fire Department Plan Review Number: _____

Supplemental Information (DO NOT INCLUDE WITH REVIEW SUBMITTAL):

Fire Flow Calculation Area or Fire Area (2012 IFC, Definitions) – The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building. If a fire wall/barrier is included, then the total fire flow calculation area provided on the memo shall include the total square footage on “each side” of the wall.

Reduction for Fire Sprinklers (2012 IFC, Section B105.2) –A reduction in fire flow up to 75% may be granted by the Fire Code Official for the installation of an NFPA 13 or NFPA 13R fire sprinkler, whether they are required or not. *Any reduction must be approved by the Fire Code Official (Fire Marshal) after review of the building, water distribution system, and use of the building.*

Example: If the building requires 5000-gpm per Table B105, and the building is sprinklered, then the required fire flow may be reduced to 2500-gpm. The required number of hydrants and spacing will be determined by the reduced fire flow. The minimum flow accepted for commercial building is 1500-gpm. When reducing the fire flows, you will occasionally end up with an odd number such as 1825-gpm, in these cases you should round up to the nearest 250-gpm.

Multiple Buildings on One Site – If multiple buildings are proposed on one site (ie. Apartment Complex), then each “building” shall be evaluated *based on the largest building and* a single memo using the recommended format repeated for each individual structure.