



Town of New Castle
450 W. Main Street
PO Box 90
New Castle, CO 81647

Administration Department
Phone: (970) 984-2311
Fax: (970) 984-2716
www.newcastlecolorado.org

Memorandum

To: Mayor & Council
From: Paul Smith
Re: Discuss three new provisions to Title 15 of the Town Code concerning construction requirements.
Date: 11/18/25
Purpose:

In its ongoing efforts to implement the latest in building science and best practices, the Building Department is exploring three code changes for 2026. Together these changes will serve to improve life safety and employ construction efficiencies. The proposed updates are as follows:

- 1. Wildland/Urban Interface Code (WUI):** The unease with encroachment of new structures into surrounding wildland areas prompted Council, in 2023, to approve ordinance TC 2023-7 adopting the 2021 International Code Council's (ICC) WUI code with amendments. The goal of the adoption was to promote structure "hardening" or resiliency to wildfire events. Among the various WUI requirements, the Town amended the provision for ignition resistance of external materials (e.g. siding, decks, and eaves) by reducing the flame spread requirement from Class A to Class B. The reduction was intended to allow owners time to acclimate to the demands of sourcing compliant materials while budgeting for the new reality.

Since that time, Staff is convinced that the time has come to reconsider the Class B amendment. There are at least three reasons for this:

- Class A materials have become increasingly more available as manufacturers and vendors rise to meet demand.
- With the State of Colorado's adoption of SB 23-166, all jurisdictions will be expected to adopt the state's Colorado Wildfire Resiliency Code. The state code requires Class A ignition resistance for all new structures and portions of alterations to existing structures within a medium to high hazard classification.
- Land use approvals of new developments such as 9 N Wild Horse and the issuance of permits for Filing 6B at the upper reaches of Deer Valley Dr – all at or in significantly hazardous wildfire areas – is making it more imperative to promote the most effective means of ignition resistance.

Initially, Staff was inclined to simply adopt the state standards. However, the state's current hazard classification for New Castle (low-to-medium) does not align with the opinion of CRFR (medium-to-high). The Town must appeal this classification with the state (a procedure it will

eventually pursue) if it believes the higher hazard classification is more representative of the Town. This appeal, however, can be time consuming and risks new construction in high hazard areas with only Class B materials. Therefore, to get ahead of new development in 2026, Staff is requesting that Council repeal the Class B amendment which currently reads as follows:

Subsection 503.2 #1.1 is hereby deleted and replaced by the following text:

1.1 Flame Spread. Materials shall exhibit a flame spread index not exceeding 75 (Class B).

The proposed revision shall read as follows:

Subsection 503.2 #1.1 of the 2021 International Code Council's Wildland Urban Interface Code as amended by Ordinance TC 2023-7 is hereby repealed.



Class A/Class B Comparison

- 2. Requirements for Energy Recovery Ventilators (ERV):** With the adoption of the 2021 International Energy Code, new homes and commercial structures are now expected to be significantly more resistant to air leakage so to reduce energy consumption and costs. However, tighter structures complicate ways to eliminate moisture and air contaminants. To address this problem, codes require “whole-house ventilation”, which essentially is a mechanical exhaust system that replaces a home’s bad air with good air. Bathroom fans, range exhaust fans (i.e. hoods), and furnace supply ducts have been used for this purpose to varying degrees of success. Though the code allows these methods, Staff has found their application to often be poorly implemented and at times ineffective. Additionally, Staff is routinely enlisted to problem solve alternatives or fixes for these systems and sometimes blamed when they are unsuccessful.

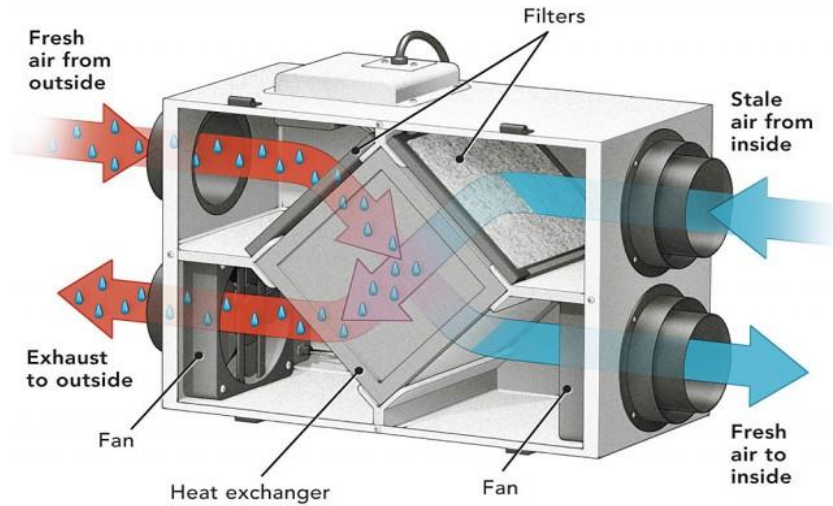
Staff is therefore asking Council’s consideration of better technology, namely ERV’s, which are considerably more effective and efficient means of whole-house ventilation. ERV’s not only replace the bad air with the good air, they also recover a significant portion of the conditioned air temperature (see ERV image) that would otherwise be lost using other methods.

Staff is requesting Council’s consideration for adding the following amendment to Section 15.22.020 of the Municipal Code:

Section R403.6.1 is hereby amended to read as follows:

Section R403.6.1 Heat or energy recovery ventilation. Dwelling units shall be provided with a heat recovery or energy recovery ventilation system in Climate Zones 6, 7, and 8. The system shall be balanced with a minimum sensible heater recovery efficiency of 65 percent at 32°F (0°C) at a flow

greater than or equal to the design airflow.



Typical ERV Design

- 3. Requirements for the design of party walls and townhouse separation walls:** Structures such as townhomes, duplexes, condominium properties, or adjoining commercial properties in close proximity to a lot line are required by building codes to create fire separation with the installation of rated wall assemblies. A rated wall assembly typically has a 1 hour to 2 hour (sometimes more) resistance to fire spread. These assemblies are allowed to be built with various materials and methods as tested and approved by certified agencies. Most of the time those separation walls are built with gypsum products because of availability and costs.

In New Castle, a vast majority of separation walls are built using conventional 4'x8' sheets of drywall on both sides of a shared wall between two townhomes (see image below). Though these assemblies are allowed by code the construction of these walls in the field is quite complex and inevitably leads to compromises. When the walls between units are vertically displaced, for example, the displacement makes it cumbersome (and at times impossible) to sufficiently seal the horizontal seams when the upper level walls are stacked on top of the lower level walls. Therefore, Staff is proposing an amendment to the code that requires separation walls to be built as "shaftwall" assemblies (see images next page). Shaftwalls are assembled by friction fitting sections of gypsum panels to metal tracks. All of this is accomplished on one side of the assembly so wall steps or obstructions on the opposite side of the wall do not compromise the integrity of the fire rating.



Staff is requesting Council's consideration of the amendments to the municipal code below.

Section 15.08.020 related to the IBC (i.e. apartments and condos):

Section 706.1.1 is hereby amended to read as follows:

Section 706.1.1 Party Walls. Any wall located on a lot line between adjacent buildings, which is used or adapted for joint service between the two buildings, shall be constructed as a fire wall in accordance with Section 706. Party walls shall be constructed without openings and shall create separate buildings. Such walls shall be constructed of an approved shaftwall-type assembly unless otherwise approved by the Building Official.

Sections 15.10.020 related to the IRC (i.e. townhomes):

Section R302.2 is hereby amended to read as follows:

Section R302.2 Townhouses. Walls separating townhouse units shall be constructed in accordance with Section R302.2.1 or R302.2.2 and shall comply with Sections 302.2.3 through 302.2.5. Such walls shall be constructed of an approved shaftwall-type assembly unless otherwise approved by the Building Official.

