<u>Stephen V. Skalko, P.E. & Associates, LLC</u>

P.O. Box 7821 Macon, Georgia 31209 (478) 477-5028 svskalko@svskalko-pe.com

March 11, 2022

Washington State Building Code Council P.O. Box 41449 Olympia, Washington 98504-1449

RE: Code Change Log Number 21-GP1-080:

TO: State Building Code Council members,

The Northwest Cement Council recommends disapproval of code change 21-GP1-080.

Fire walls provide one of the most important fire safety features the building code may require in a building. They are used to limit the size of buildings to reduce the risk of fire spread from one fire compartment to another. This enhances the fire services ability to perform firefighting operations and manage the extent of damage from the fire. Fire walls also reduce the risk of fire exposure to occupants in adjacent compartments and minimize property losses from the fire event by preventing the spread of fire.

The ability of the fire wall to meet these objectives is based on their required fire resistance and structural design/integrity to minimize collapse during a fire. The permitted materials for construction of the firewall also plays an important role in this regard. Traditionally, fire walls have been constructed of noncombustible materials even though materials within the buildings separated by the fire wall include combustible elements. Using noncombustible materials for the fire wall means the fire walls will not contribute to the fire load of a fire event.

Though the Washington State Building Code (WSBC) does permit combustible materials to be used for fire walls in buildings constructed completely of combustible materials (i.e., Type V, all light wood frame), these buildings are limited in size which means the fire event is also limited in size. However, buildings of Type III and IV construction, are permitted to be constructed much larger in size. One of the reasons for this permitted size increase is buildings of Type III and IV construction are required to have exterior walls that are fire-rated and constructed of noncombustible materials, which helps limit the spread of fire to adjacent buildings and properties. These important features for the exterior walls offset the larger sizes these

buildings are permitted to be constructed, especially since the interiors of these building construction types contain combustible materials. Fire walls in buildings of Types III and IV construction perform a function like these exterior walls to limit fire spread to the adjacent buildings. For fire walls it is an adjacent building compartment.

This proposal reduces the effectiveness of the fire walls by permitting the wall construction to be of combustible materials in buildings of Type III and IV construction. This is contrary to the fire safety objectives of the building code outlined above (i.e., firefighter safety and operations, occupant safety and property protection).

Further, the proponent suggests that since a wood frame building (Type V) is allowed to be one-half of the size of a Type III or IV construction, and with similar interiors, the allowance of combustible materials for the fire walls are justified. However, another way to look at this logic is the Type III and IV buildings actually may have twice as much combustible load in the interior since they are twice as large. Higher fire loads on the interior of a building should dictate more stringent measures for the fire walls, not less. This is another reason the building code change should be disapproved since the WSBC has appropriate fire wall requirements already in place. No valid reason has been given to reduce the fire wall requirements.

Finally, the proponent patterned this code change based on a similar code change submitted through the ICC 2021 Code Change process. That code change was not approved based on similar reasons outlined in our objections above. This change should be disapproved likewise.

Recommend disapproval of 21-GP1-80

Thank you for the opportunity to offer this comment.

Stephen V. Skalko, P.E.

On behalf of the Northwest Cement Council

Stephen V. Skalko, P.E. & Associates, LLC P.O. Box 7821 Macon, GA 31209 (478) 477-5028 – Office (478) 731-4321 – Mobile svskalko@svskalko-pe.com