

# Agrichemical Warehousing Standard Association

## ACCREDITED SEED TREATMENT STANDARDS BULLETIN

Revised June 15, 2023

NUMBER: 2

### Fire Separation Requirements for Storage and/or Treatment Areas Enclosed Within Multiple Occupancy Buildings (Relating to Protocols B1 & B2)

Protocols B1 and B2 outline structural requirements for Storage (B1) and Seed Treatment (B2) areas. This bulletin is provided to clarify the fire separation requirements when storage and/or seed treatment areas are housed within a building with multiple occupancies.

Protocol B1 states:

*The **storage area(s)**, if enclosed within a building, must be separated from other occupancies by a permanent two-hour fire separation. Interior fire compartment separation wall openings are provided with self-closing doors and if applicable, fire dampers having resistance rating of 1.5 hours, including the frames.*

The definition of “other” occupancies could include the following: offices, maintenance shops, lunchrooms, or other areas, which may be physically occupied. This excludes occupancies associated with seed (treated or untreated) handling/storage processes.

Examples of incompatible occupancies/equipment include:

- Storage of power tools and/or storage of fuel powered equipment (which contain fuel)
- Sales/mercantile areas
- Feed storage

Protocols B2 states:

*The **seed treatment area(s)**, if enclosed within a building, must be separated from other occupancies by a permanent two-hour fire separation. Interior fire compartment separation wall openings are provided with self-closing doors and if applicable, fire dampers having resistance rating of 1.5 hours, including the frames.*

*The seed treatment areas pre-audited prior to March 31, 2015 can be grandfathered and exempted from this provision, with the exception of offices, lunchrooms and maintenance shops*

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The seed treatment areas pre-audited prior to March 31, 2015 can be grandfathered and exempted from this provision, with the exception of offices, lunchrooms and maintenance shops.

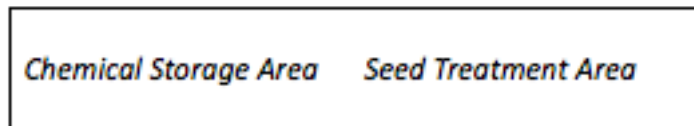
Seed treatment areas pre-audited prior to March 31, 2015 can be also grandfathered to allow for seed cleaning activities in the same area as the seed treatment area. Sites not grandfathered require separation, as outlined in Protocol B2, between the seed cleaning area and the seed treatment area.

Note: If the seed treatment area is seasonal, the storage area can be used for other purposes provided that no agrichemicals are present in the off-season. A SOP is required to evidence this procedure.

If as part of the seed treatment area there are augers (including belts) that protrude through established firewalls they will be viewed as exempt from requiring a damper or an alternative modification to achieve a fire rating.

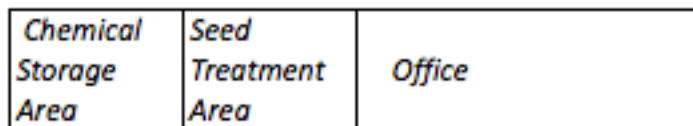
Interpretation examples:

**Scenario 1:**



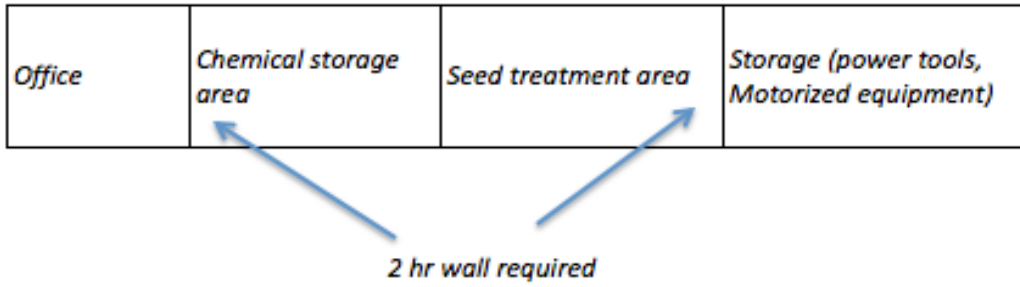
In this scenario, the exterior walls must be non-combustible or provide a minimum of a one-hour fire rating. A separate between the chemical storage area and seed treatment area is not required. Given the storage and treatment area is treated as one, the entire area must complete with the requirements for both storage and treatment.

**Scenario 2.**



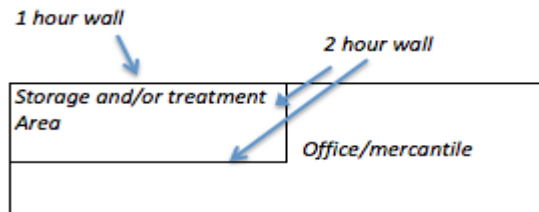
In this scenario, the exterior walls must be non-combustible or provide a minimum of a one-hour fire rating. The wall between the Seed treatment area and the office must have a two-hour fire rating. The wall between the chemical storage area and seed treatment area is optional.

**Scenario 3.**



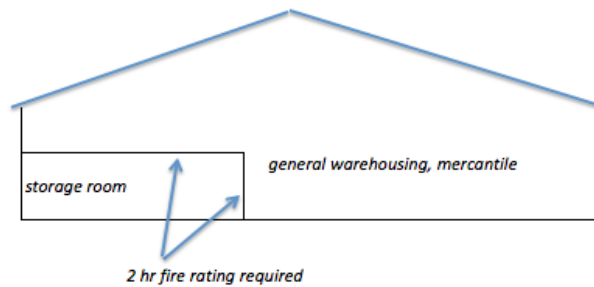
In this scenario, the exterior walls must be non-combustible or provide a minimum of a one-hour fire rating. A two-hour fire separation is required between the office area and the chemical storage area. A two-hour fire separation is also required to separate chemical storage area from the general storage area. This division can be the wall between the chemical storage area and the seed treatment area if the site is grandfathered. If the site is not grandfathered, a two-hour fire separation is required between the seed treatment area and the general storage area.

**Scenario 4.**



In this scenario, the exterior walls must be non-combustible or provide a minimum of a one-hour fire rating. A two-hour fire separation is required between the office/Mercantile area and the chemical storage/treatment area.

**Scenario 5.**



In this scenario, the exterior walls must be non-combustible or provide a minimum of a one-hour fire rating. A two-hour fire separation is required between the general warehouse/mercantile area and the chemical storage area. The ceiling of the storage room would require a two hours fire rating (both sides).

## Questions and Answers.

Question/Scenario	Answer/Interpretation
Does Insulation impact the fire-rating of a wall assembly?	<p>Yes – Many warehouses use insulation in their wall assemblies to provide protection from the elements. This is allowed provided:</p> <ul style="list-style-type: none"> <li>• If the insulation is applied to non-combustible construction materials (steel studs, steel siding etc.), evidence would be required that confirms the insulation is non-combustible. If the insulation is combustible, the wall assembly must be made up of a combination of materials (insulation, drywall) to get the required rating (1 or 2 hours).</li> <li>• For walls made of combustible materials, insulation must be factored into the assembly to confirm that the combination of materials provides a 1 (or 2) hour rating</li> </ul>
For a wall assembly separating a mercantile area and a seed treatment and/or storage areas, is fire rating required on both side of the wall?	Fire rating is required on both sides of the wall
Can plywood be applied over drywall?	<p>Some warehouses apply plywood over drywall to serve as protection from impact.</p> <p>The addition of wood structural panels covering the fire-rated gypsum <b>board wall</b> assemblies is permitted. (Reference NBC 2015, Clause 3.1.5.12)</p> <p>Further, when constructed of combustible materials, plywood is allowed to be added onto of the drywall. (Reference NBC 2015, Clause 3.1.5.6)</p> <p>See Warehouse Bulletin # 4 (January 2023) for further details.</p>
When a treatment area is enclosed within a building and there is an opening through which an auger runs to load trucks outside, what is required to maintain a 1-hour fire rating?	Exterior doors and windows do not require fire rating; consequently rating around pass through is not required. Fire rating would be required for openings in interior fire separation walls.
For interior firewalls – how high must they be?	For interior fire walls, the 2 hours wall assembly must go up to the roof, unless the storage and/or treatment areas are fire compartments (i.e. the walls and the ceiling have a two hour rating (see scenario #5)).
Can a fire-proof cabinet be used to store seed treatment products?	<p>Yes provided that the cabinet capacity does not exceed the storage of 1000L. Signage and containment is required. Ventilation inside the cabinet is not required. The room within which the cabinet is housed does not require firewalls. Documentation to evidence fire proofing of the cabinet is necessary. The rating that will be on the cabinet is NFPA 30. The fire cabinet must be located within a containment area (or the cabinet has internal containment sufficient to contain 110% of the largest container stored). There are no special flooring requirements for the room within which the cabinet is housed.</p>

<p>What is considered product storage versus in use?</p>	<p>A tote that is connected to a seed treater is considered in use. All other seed treatment products must be kept in the designated storage area.</p>
<p>Can paint be used to achieve a fire rating?</p>	<p>Paint doesn't give any fire rating. It provides flame spread ratings which is something completely different. Fire resistant resists the flame spread whereas fire walls prevent the structural failure in case of fire.</p> <p>When the seed code was implemented some grandfathered sites with elevated treaters with combustible support structure (i.e., wood) were granted allowance to use paint with a fire spread rating of A on the support structure. This would not be acceptable for any new certifications or renovation of existing certified sites.</p>
<p>What is the building code classification for a storage area and what is the classification for the treating area?</p>	<p>F1 or F2.</p> <p>For the treatment area the products are not combustible/explosive, then explosion proof wiring is not needed.</p> <p>If the products are not combustible/explosion proof, the storage and treatment area is classified as F1</p>