



SHERWIN-WILLIAMS® **Protective & Marine Coatings**

Firetex FX5090 is a water-based intumescent fire protective coating designed to have a more aesthetically pleasing finish than other methods of fire proofing. It is designed to be applied to exterior and interior steel structures, in accordance to UL 263, UL CDXA and UL CDYD. Please note this product is not designed to meet any rating for UL1709, hydrocarbon and/or chemical fire ratings on structural steel.

Equipment:

- Air-powered airless or Electric Airless pump capable of minimum 1.25 GPM and 3000psi, such as a Graco 1595, Titan 1140i, or Xtreme X30. Pump should either be direct immersion or gravity feed hopper type. Siphon tubes are not recommended due to potential for clogging.
- Longer line lengths will require larger pumps.
- Filters should be removed from pumps and guns.
- Minimum of 3/8" lines are recommended. A working gun swivel or Z-swivel with no whip hose is preferred, but a short 1/4" whip hose may be used if required.
- .19 - .23" tip sizes are typical. Heavy duty airless tips are recommended, such as Graco XHD XXX series.
- Graco XTR 5 or 7 gun is recommended due to no wetted trigger spring, no diffuser bar and large gun opening.
- Clean-up is warm water followed by a flush of denatured alcohol.
- Ideal pump setup for a large project would be as follows:
 - Graco Xtreme X45DH6 (4500 psi model) or X60DH6 (6000 psi model) both with hopper feed. Alternatively, a drum feed system could be used which would utilize a 5:1 Graco Monark drum supply package and a Twistork agitator.
 - 3/8" line upto 200ft. Run 1/2" line thereafter from the pump, up to 400ft.
 - XTR 7 gun , with XHD tips and Z-swivel (no whip hose)

Crew Size:

Project dependent. To effectively operate the equipment in a production environment, this will require a pump operator and an applicator.

Technical Notes:

- This material should only be applied over an approved primer listed on our product data sheet. Please consult a Firetex specialist if your primer is not listed.
- This material should only be topcoated with an approved topcoat listed on our product data sheet. Please consult a Firetex specialist if your primer is not listed.
- Material should be stored in a warm area 70 deg F or above for optimal application performance.
- Minimum surface and air temperature of 40 deg F required. Do not apply less than 5 deg F above dew point or above 80% relative humidity
- Contractor should be monitoring jobsite environmental conditions at a minimum of once at start-up, at 4-hour intervals, and once at shutdown each day. If conditions dictate, more frequent environmental measurements may be required.
- Contractor should have the following test equipment onsite, as well as an individual qualified to perform the tests according to industry standards. A sling psychrometer w/ psychometric tables or an electronic dew point meter capable of recording dew point and relative humidity, an IR non-contact surface thermometer, wet-film thickness gauges and a Type II Electromagnetic Dry Film Thickness Gage capable of recording upto the specified thickness of the project. All gages should be certified and calibrated at least within the last year.
- Daily logs with environmental readings and DFT measurements may be required by the specification. Additional information may also be required, please consult the project contract documents.
- No reduction is allowed unless a Firetex Specialist or Technical Service gives written approval. Although it is acceptable to lay a thin blanket of water (just enough to cover the surface) to the material in the workpot or hopper to prevent skinning over. This water layers should not be mixed into the material. When adding new material, take care to pour in a manner to not disrupt the water layer and mix into the material.
- The pump may require periodic flushing throughout a project especially in hotter conditions. Water flushing is suitable for intermittent flushing, however a flush of denatured alcohol after a thorough water flush is

recommended at the end of the day. Alcohol should be flushed clean with water before loading Firetex in the pump. It is also advisable to alcohol flush a new pump or a previously used pump at project startup.

- For applications above 80 mils DFT, it is not recommended to apply more than 2 coats in a single day regardless of recoat time. Before recoating, it is recommended to check the film by pressing a sharp object firmly into the film and ensure it is hard through the film. Trapping excess water in the film can lead to delamination or failure of the system to protect the steel in the event of a fire.
- Typically painting a steel beam, it is more efficient to turn the spray pattern parallel to the beam and keep the gun in constant motion so as to minimize waste. This is done in a sort of "shaking" motion on smaller I-beams. It is best to build the system in lifts of about 35-45 mils wet if a pleasing finish is desired.
- Work should be done to minimize overspray on work not yet coated. Do not coat over beams with loosely adhered, dry overspray.
- A dry or slightly damp roller may be used to correct runs or sags after material exhibits a dry surface, but can still be moved underneath. Typically this is 10-20 minutes after application depending on jobsite conditions.
- At each coat, DFT measurements should be taken as directed by contract documents and recorded on the member with a suitable marking instrument (note black Sharpies may bleed through). This allows the applicator to determine where he needs to make up or reduce thickness on each coat rather than waiting until the final coat.
- Handling times will vary greatly with application conditions, film thickness and air exchanges in the application area.
- Approved top coat for applications which will be permanently exposed to the elements, freeze/thaw cycling, high humidity areas or for situations where the applied fireproofing will be in these environments for a period greater than six months is Sherwin-Williams Acrolon 100.

If you should have any questions, feel free to contact your Sherwin-Williams Sales Representative, Firetex Specialist or Technical Service Representative.