

Eastern Sheet Metal spiral is extremely popular not only for concealed ceilings but in exposed duct designs as well. One of our most common inquiries is can the galvanized steel be painted? The answer is yes, and the added advantage is that the galvanized steel maintains its corrosive protection qualities.

Consider Your Steel Type. For exposed ductwork, two types of steel are generally used - hot dipped galvanized steel and "paint grip" steel.

- "Paint Grip" steel is mill phosphatized or galvanized.
 - Galvanized steel is, as its name implies, annealed. This annealing softens the steel, making it more prone to dings and dents.
 - Mill phosphatized steel has a zinc phosphate coating. Zinc phosphate is considered dangerous to aquatic life and special handling is required at the mill to prevent its release into the environment.
- Both annealing and phosphating processes promote paint adhesion by damaging the original hot dip galvanized coating. This means that once you specify or choose "paint grip" you have no choice but to paint it. "Paint grip" steels are also rougher than standard hot dip galvanized steel so additional lubricants are required in the spiral forming process, which in turn will require additional cleaning in the field.
- It is often assumed that only "paint grip" steel can be utilized if field paint is to be applied. This is not the case. Many high quality paint products are available today, such as Sherwin Williams Waterborne Acrylic Dryfall (B42W series). These products not only adhere to the hot dipped galvanized surfaces, but they also allow the duct to keep its original zinc protection.

ESM Recommendation.

- For exposed spiral ductwork, use hot dipped galvanized steel. It can be painted as described above or left unpainted as the job requires.
- When choosing any steel or paint type, please be sure to take the surrounding environment into consideration. Areas such as pools can cause damage to an unpainted galvanized surface.
- Upon receipt, remove all dirt, grease, and manufacturing lubricant, with a non-hydrocarbon cleaner such as Simple Green. Wipe the duct dry with a clean dry cloth before painting.
- Cleaning is always required. The duct does not arrive at the jobsite "ready to paint" in most cases. ESM uses only water based lubricants which are easily cleaned.
- Following the paint manufacturer's recommendations.