



FIRST BOND, THEN POWDER - PROBLEM SOLVED

Introducing tesa® FUSE 45012 - a ground-breaking bonding solution enabling metal fabricators to bond metal with tape before powder coating.

- Heat-reactive self-adhesive tape in roll format
- Bonds metal parts before powder coating
- Cures to final strength in the powder coating oven
- Features semi-structural bonding performance



FIRM AND DURABLE BOND

tesa® FUSE 45012 can be used to bond metal parts, even dissimilar materials like steel and aluminium. It provides a firm and durable bond for applications such as stiffeners, frames, cover plates, or attachment parts.



01 Metal Bonding

tesa® FUSE 45012 can be applied like a self-adhesive tape during assembling. It saves time due to a fast, clean, and simple process.



02 Powder Coating

tesa® FUSE 45012 withstands typical chemical pre-treatments, as well as very high oven temperatures. During the baking process, tesa® FUSE 45012 cures to final strength



03 Outstanding Performance

After powder coating, tesa® FUSE 45012 provides very high strength and temperature resistance. It remains elastic and can compensate for thermal elongation

tesa® FUSE 45012 has been designed to combine the advantages of tape with the strength of an adhesive:

- **Invisible Bond** – Perfect surface finish, no welding marks
- **Design Freedom** – Build modules from different metal types
- **Efficient Process** – Finish module assembly before powder coating
- **Higher Performance** – Significantly higher bonding strength and temperature resistance than regular tape
- **Time-saving** – No surface finish (like grinding) needed, no curing time

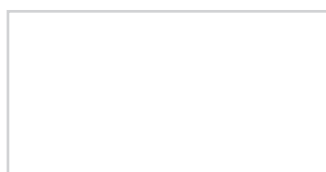
Typical Product Properties

Thickness	Lap shear strength	Maximum shear strain	Long term temperature resistance ^[a]
1,2 mm	310 N/cm ²	360 %	120 °C

All values after curing for 30 minutes at 200°C

[a] Static lap shear test according to tesa test methods. Hold 2 kg for 10.000 minutes with a bonding area of 3,125 cm².

Distribution Partner



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