

# SPRAYING MANUAL

Tensorgy IV.

Adhesives That Outperform





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# SPRAY PATTERNS

## IDENTIFYING SPRAY PATTERNS

\*\*IMPORTANT\*\* AI WAYS CHECK WHAT TYPE OF SPRAY PATTERN YOUR ADHESIVE HAS BEFORE SPRAYING.



It is imperative that you ensure what type of spray pattern the adhesive will be released from the container in; failure to identify this can lead to improper applications and undesired results. To confirm the product's spray pattern, simply check the label and a property icon (like the one pictured left and listed below) will indicate this.

## TYPES OF SPRAY PATTERN



## **WEB SPRAY**

#### Description:

The easiest visual comparison that can be made to a Web spray is that of a spider's web, hence the name!



## MIST SPRAY

#### Description:

Mist spray adhesives are released from the container as a fine mist, which creates a light and consistent droplet pattern on the surface it is sprayed upon.



## PEBBLE SPRAY

## Description:

Pebble sprays are similar to Mist sprays however the pattern is made up of larger droplets, but still giving a smooth and consistent pattern on the surface.



## SNOWFLAKE SPRAY

#### Description:

Snowflake spray adhesives have a High build, large flake spray pattern which resemble snowflakes across the surface for single-sided bonds.



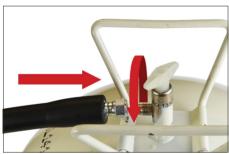


PREPARING THE CANISTER

# **CANISTER PREPARATION**



 Screw the larger hose nut to the gun thread (clockwise) and fully tighten with a wrench. Check hose is securely attached.



Screw the smaller hose nut to the canister (clockwise) and fully tighten with a wrench.
 Check the hose is securely attached.



3. Turn on the valve on the canister counterclockwise until fully open. Check connections for any leaks and if any occur tighten connections. DO NOT TURN THE CANISTER VALVE OFF UNTIL THE CANISTER IS EMPTY (this is to prevent the adhesive curing in the hose and gun).



4. On initial use, or if the product has been standing for more than 12 hours, the hose and gun may require a purge. Do this by pulling the trigger and adjusting the flow by turning the adjustment screw at the back of the gun (counter-clockwise to open and clockwise to close). Dispense and discard adhesive until a consistent spray pattern is achieved.

# TIP INSTALLATION

# Please follow these instructions before spraying!!



1. Unscrew tip retainer



2. Lay spray tip on top



3. Like so...



4. Lay tip retainer on top



5. Screw on tip retainer



6. Tighten with wrench



7. ...until tip is straight



8. Spray!





WEB SPRAY

# **WEB SPRAY**



 Prepare the surface to be bonded; ensuring both faces are clean, free of dust, dirt and grease. If necessary wipe clean with proprietary solvent-based cleaner. DO NOT USE MINERAL SPIRITS OR CITRUS-BASED CLEANERS.



 Hold spray gun at a constant distance of between 4-10") from the surface, allowing the adhesive to web across the surface with approximately 5-15% overlap to successive passes for thin laminates to reduce risk of telegraphing (note — correct coat weight must be achieved).



3. Maintain a constant speed of application during spraying, applying a consistent and thorough coating without allowing the adhesive to puddle or heavily 'wet' the surface. Maximum bond strength is achieved with coverage of between 80-100%, and a recommended minimum coat weight of 2 dry grams per ft<sup>2</sup>.



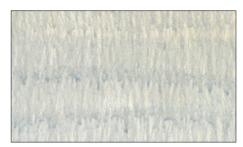
4. Maximum adhesion will be obtained by spraying opposing faces at 90° to each other, i.e. one face vertically, the other face horizontally. Double coating perimeter of face and edges is recommended, including areas around subsequent cutting positions.

# BONDING TECHNIQUES

- Do not angle spray gun or move in an arc while spraying. Hold gun at 90° to surface while spraying. Release trigger at end of each pass to optimize coverage.
- Many man-made boards such as plywood and especially bender board and MDF are very absorbent and will need a primer coat (shown in 'COVERAGE TOO LIGHT' picture). Allow to dry, then apply the normal 'CORRECT APPLICATION', as shown, over top of primer coat.
- Many substrates should be regarded as
  difficult to bond, e.g. metal faced HPL,
  Colorcore etc. or products with memory
  (also soft and thick materials may require
  2nd or 3rd coat). Best results are obtained
  by multiple coats rather than one heavy
  coat which may result in heavy wetting
  of surface and extended drying times.
  Always test before using in production see
  disclaimer.
- Allow adhesive to dry (see product data sheets for appropriate drying times). Test for dryness using back of hand only; surface should be tacky but adhesive should not transfer to skin. Position substrates correctly and press together working from center outwards. Apply adequate pressure using nip roller or 3" hand roller and body weight as a minimum in order to achieve at least 35psi at glue line. Note; repositioning is not possible after contact has been made.
- Immediate trimming/routing is possible.
   Full strength is achieved after 24-48 hours depending on temperature and humidity.



COVERAGE TOO LIGHT



COVERAGE TOO HEAVY



CORRECT APPLICATION = 2 dry gms/sq ft



3" HAND ROLLER







PEBBLE/MIST SPRAY

# PEBBLE/MIST SPRAY



 Prepare the surface to be bonded; ensuring both faces are clean, free of dust, dirt and grease. If necessary wipe clean with proprietary solvent-based cleaner. DO NOT USE MINERAL SPIRITS OR CITRUS-BASED CLEANERS.



 Hold spray gun at a constant distance of between 6-10" from the surface, allowing the adhesive to droplet across the surface with approximately 5-15% overlap to successive passes for thin laminates to reduce risk of telegraphing (note — correct coat weight must be achieved).



3. Maintain a constant speed of application during spraying, applying a consistent and thorough coating without allowing the adhesive to puddle or heavily 'wet' the surface. Maximum bond strength is achieved with coverage of between 80-100%, and a recommended minimum coat weight of 2 dry grams per ft².



4. Maximum adhesion will be obtained by spraying opposing faces at 90° to each other, i.e. one face vertically, the other face horizontally. Double coating perimeter of face and edges is recommended, including areas around subsequent cutting positions.

# **BONDING TECHNIQUES**

- Do not angle spray gun or move in an arc while spraying. Hold gun at 45° to surface while spraying. Release trigger at end of each pass to optimize coverage.
- Many man-made boards such as plywood and especially MDF are very absorbent and will need a primer coat (shown in 'COVERAGE TOO LIGHT' picture). Allow to dry, then apply the normal 'CORRECT APPLICATION', as shown, over top of primer coat.
- Many substrates should be regarded as
  difficult to bond, e.g. metal faced HPL,
  Colorcore etc. or products with memory
  (also soft and thick materials may require
  2nd or 3rd coat). Best results are obtained
  by multiple coats rather than one heavy
  coat which may result in heavy wetting
  of surface and extended drying times.
  Always test before using in production see
  disclaimer.
- Allow adhesive to dry (see product data sheets for appropriate drying times). Test for dryness using back of hand only; surface should be dry and adhesive should not transfer to skin. Position substrates correctly and press together working from center outwards. Apply adequate pressure using nip roller or 3" hand roller and body weight as a minimum in order to achieve at least 35psi at glue line. Note; repositioning is not possible after contact has been made.
- Immediate trimming/routing is possible.
   Full strength is achieved after 24-48 hours depending on temperature and humidity.



**COVERAGE TOO LIGHT** 



COVERAGE TOO HEAVY



CORRECT APPLICATION = 2 dry gms/sq ft



3" HAND ROLLER





SNOWFLAKE SPRAY

# SNOWFLAKE SPRAY



 Prepare the surface to be bonded; ensuring both faces are clean, free of dust, dirt and grease. If necessary wipe clean with proprietary solvent-based cleaner. DO NOT USE MINERAL SPIRITS OR CITRUS-BASED CLEANERS.



 Hold spray gun at a constant distance of between 2-3 feet from the surface, allowing the adhesive to snowflake across the surface with approximately 5-15% overlap on successive passes.



3. Maintain a constant speed of application during spraying, applying a consistent and thorough coating without allowing the adhesive to puddle or heavily 'wet' the surface. Maximum bond strength is achieved with coverage of between 80-100%, and a recommended minimum coat weight of 2 dry grams per ft².



4. Spray only one substrate. Snowflakes are about 1/8" tall and 1/4" apart.

# **BONDING TECHNIQUES**

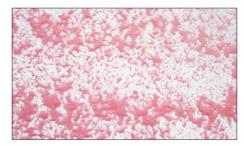
- Do not angle spray gun or move in an arc while spraying. Hold gun at 90° to surface while spraying. Release trigger at end of each pass to optimize coverage.
- Snowflake products cure through exposure to atmospheric or substrate moisture. If substrates are non-porous, adhesive will cure more slowly.
- Allow adhesive to dry 5-15 minutes (see product data sheets for appropriate drying times). Test for dryness using back of hand only; surface should be tacky but adhesive should not transfer to skin. Position substrates correctly and press together working from center outwards. Apply adequate pressure using a roller or block. Note; repositioning is possible after contact has been made.
- Porous substrates: 25% of strength will be achieved in 60 minutes, full strength achieved overnight.
- Non-porous substrates: Allow to cure at least 8 hours before handling.



COVERAGE TOO LIGHT



COVERAGE TOO HEAVY



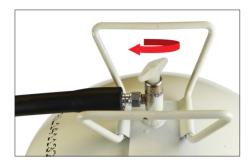
CORRECT APPLICATION = 2 dry gms/sq ft





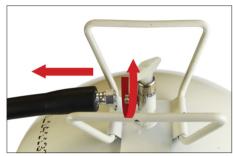
CHANGE & DISPOSE OF CANISTERS

# CHANGING TO A NEW CANISTER

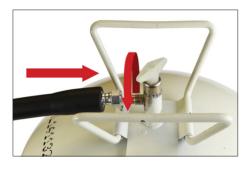


# **IMPORTANT:** SAFETY GLASSES AND GLOVES MUST BE PUT ON BEFORE STARTING THE DISPOSAL PROCESS

- Turn the valve on the canister counterclockwise until fully closed.
- 2. Pull the trigger on the gun and hold for at least 10 seconds to expel residual pressure.



 Unscrew the hose nut and disconnect the hose from the empty canister (see next page for canister disposal).



 Connect the hose and gun to the new canister (go to Step 2 of PREPARATION and follow the process through to Step 4).

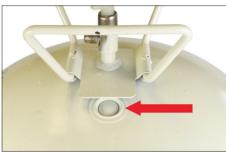
IMPORTANT NOTE: THIS PROCESS SHOULD BE FOLLOWED THROUGH IMMEDIATELY AND ADHESIVE SHOULD BE DISPENSED FROM THE NEW CAN OR THE GUN AND HOSE WILL BLOCK AND BECOME UNUSABLE.

If you are not transferring the hose and gun to a new canister you will need to clean it to ensure it can be used again on future jobs. Use TensorGrip® S101 Citrus Adhesive Cleaner to purge and clean equipment. Refer to S101 TDS for further directions.

# DISPOSING OF AN EMPTY CANISTER



- Lay the empty canister on its side with the valve pointing AWAY from the operator, and well away from sources of ignition.
- Open the canister valve (counter-clockwise) and release any residual pressure.



- Stand canister upright. Use a hammer and brass punch or other non-sparking instrument to puncture the friable disc.
- As long as the user is able to accept responsibility for de-pressurizing the canister, it can be disposed of as per your normal scrap metal disposal (subject to local waste restrictions).

## TRANSPORT INFORMATION



- During transport, the recommended PPE (Refer to SDS), First Aid Kit and suitable Fire Extinguisher should be readily accessible in the vehicle.
- Keep vehicle well ventilated at all times while it contains TensorGrip® Spray Contact Adhesive.
- Secure canister during transportation.

## DISCLAIMER

Before using the product, the user should carry out any necessary tests in order to ensure that the product is suitable for the intended application. Moreover, all users should contact the seller or the manufacturer of the product for additional technical information concerning its use if they think that the information in their possession needs to be clarified in any way, whether for normal use or a specific application of our product. The information detailed in the current technical data sheet is given by way of indication and is not exhaustive. The same applies to any information provided verbally by telephone to any prospective or existing customer.

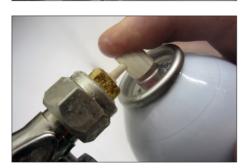
# CROSSLINKING CONTACT ADHESIVE NOTE



Because TensorGrip® Crosslinking Contact
Adhesives change state when cured, unlike regular
contact adhesives, once cured, crosslinking
contacts are not removable from the spray tip. If it is
going to be more than 10 minutes between uses of
the gun, follow this procedure to ensure maximum
performance.

- Wear safety glasses. Using TensorGrip® S800
   Tip Cleaner, leave the tip on the gun and point
   aerosol and gun away from yourself.
- 2. Spray ac tip is cle

2. Spray aerosol around the tip until the whole tip is clean.



 Hold TensorGrip® S800 nozzle DIRECTLY on or within 1/2" of the orifice of the tip. Spray S800 directly into the orifice until it is clear (usually 1-3 seconds). If you are having trouble with one of our products or if you require any further information, please don't hesitate to get in touch.

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