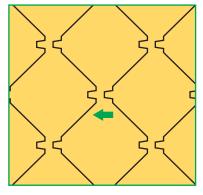
# "MA" (MECHANICAL ASSEMBLY) TECHNOLOGY "MA Technology" is available in many Brentwood Fills and

Brentwood's patented "MA Technology" allows fill or drift eliminator packs to be permanently assembled, without glue, by crimping the male/female attachment tabs molded into the individual sheets.

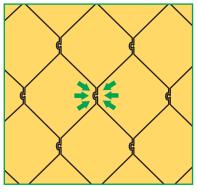
This innovative attachment process produces packs that are exceptionally strong, environmentally-friendly, less expensive than glued, and easily, efficiently assembled on-site.



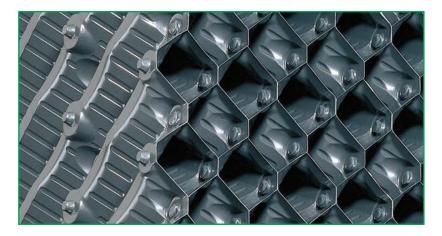


Drift Eliminators ... and can be applied to your proprietary designs.

Male/female attachment tabs align with the adjoining sheet's tabs



Attachment tabs are pressure-sealed to create a strong, permanent bond ... without glue, solvents, or adhesives!



# **STRONG**

Supports weight 10 times greater than the average fill load (fill + water)

#### ENVIRONMENTALLY-FRIENDLY

Glue-free assembly eliminates Volatile Organic Compound emissions and addresses EPA Clean Air Act 40CFR50-97 and OSHA 29CFR1910.1200.

#### DURABLE

"MA" packs are made from PVC sheet material meeting CTI Standard 136.

#### **ECONOMICAL**

Savings on glue is passed on to you.

#### **VERSATILE**

"MA" design can be used with other plastic materials per your specs.

## **HIGH PERFORMANCE**

Performance comparable to glued designs

#### **IDEAL FOR FIELD ASSEMBLY**

Increases your savings and addresses OSHA and EPA concerns.



# "MA" (MECHANICAL ASSEMBLY) TECHNOLOGY

#### **HOW "MA" WORKS**

To make an "MA" pack, first assemble two sheets into a pair using the male/female attachment tabs that align with and nest into the adjoining sheet's tabs (Fig. 1). Then crimp the attachment tabs using a Brentwood MAssembler (Figs. 2 and 3).

Finally, using the same "MA" pressure-sealed attachment technique, edge-bond the assembled pair to another pair (Fig. 4) and then repeat the process until a pack in the desired width is assembled (Fig. 5).

#### "MA" IS STRONG

Each mechanically-assembled pair of "MA" sheets is, in effect, a small pack having a very high beam strength proportional to its depth. When edge-bonded into a full-size pack, the result is a pack that can support weight 10 times greater than the average fill load (fill plus water). And, because all the tabs nest into the adjoining sheet's tabs, even the uncrimped tabs in the center of the pack provide lateral strength.

Every "MA" design undergoes the following performance tests: Load; Durability & Handling; Elevated Temperature; Cold & Freezing; and Mechanical Fatigue.

#### "MA" IS ENVIRONMENTALLY-FRIENDLY

In the last 20 years, U.S. industry has made great strides in reducing pollution. With the help of the EPA, the current focus in American industry is on reducing air pollution, including VOCs (Volatile Organic Compounds) found in oil-based paints, auto fuels, and most petroleum products. The EPA reports that 20% of the VOCs discharged into the air are from industrial production applications.

Glued cooling tower fill packs contain VOCs. At Brentwood, we have been working for the last two decades to reduce the amount of VOCs we use, and to find other assembly methods to eliminate gluing altogether. "MA" (Mechanical Assembly) is the answer! This method of assembly uses no glue, produces an exceptionally strong pack, is less expensive than glued packs, and successfully addresses both the Clean Air Act and OSHA's Hazard Communication regulation.

### "MA" IS ECONOMICAL

- Since there are no glue costs, those savings are passed on to the customer.
- Save even more on shipping costs by assembling on-site. (Approximately 7 times more unassembled sheets can be shipped per truck than fully-assembled packs.)

#### "MA" IS EASILY AND EFFICIENTLY ASSEMBLED ON-SITE\*

- MAssembler equipment (below) is simple to set up on-site, easy to use, and is rented on a per project basis to save costs. Shipping size is approximately 225 ft<sup>3</sup> (6.4 m<sup>3</sup>), including Feed and Take-off Tables and Complete Field Manual.
- No "double-handling" of packs. Packs can go right into the tower after assembly.



- Conservative output rates (crew of 4-5 people) are 300 ft<sup>3</sup> (8.5 m<sup>3</sup>) per hour for 24" (610 mm) deep fill packs and 180 ft<sup>3</sup> (5.1 m<sup>3</sup>) per hour for 12" (305 mm) packs.
- As fast to assemble as gluing
- No EPA, OSHA, or fire concerns
- \* Not all "MA" products are available for field assembly. Please consult Brentwood for availability.



Fig. 1)
Male/Female
attachment tabs
align with and nest
into the adjoining
sheet's tabs.



Fig. 2) Attachment tabs are pressure-sealed ...



Fig. 3)
... creating a
strong, permanent
bond without
glue, solvents, or
adhesives!

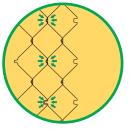


Fig. 4)
Edge-bond one
assembled pair
of "MA" sheets
to another.

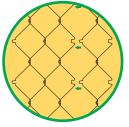


Fig. 5) Repeat the process until the pack is the desired width.



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