

TEXTRON Fastening Systems

Commercial Solutions

Elco Construction Products

PanelMate

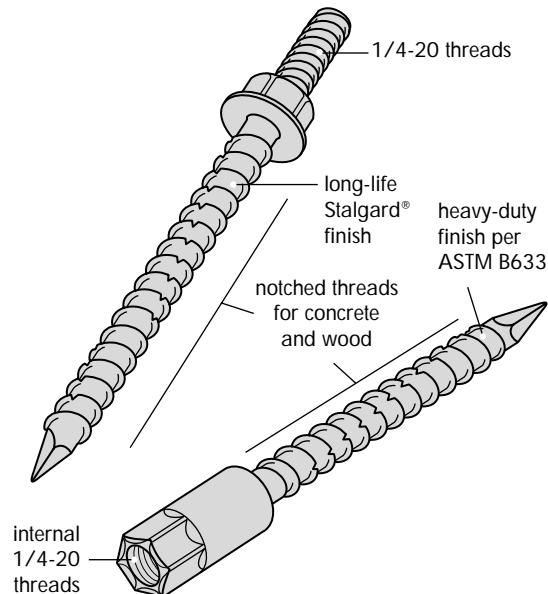
Storm Panel Anchoring System

PanelMate® Storm Panel Anchoring System . . . The Fastest-To-Install And Most-Economical Method Of Securing Hurricane Protection Yet!

Make the most of your installation day with Elco® PanelMate® storm panel anchoring system. The PanelMate® anchoring system puts an end to the time-consuming installation of machine screw anchors, aluminum headers, sills, mounting channels and angle brackets. Just drill-and-drive your way to faster, better-looking and more-profitable installations! It's that simple. Perfect for new construction applications and ideal for retrofitting.

PanelMate® anchors install quickly and securely into concrete, concrete block and wood materials. Once in place, the PanelMate® anchors await quick and easy attachment of storm panels with standard 1/4 – 20 hardware.

Additionally, PanelMate® anchors are cold-formed from a special alloy that incorporates a proprietary heat-treating technology. As such, PanelMate® anchors provide excellent protection against delayed embrittlement failures that can occur when using other hardened fasteners in dissimilar metal applications . . . making PanelMate® anchors the clear and obvious choice when encountering aluminum, galvanized steel and stainless steel.



METRO DADE STANDARDS		
PA202-94	PA201-94	PA203-94

PanelMate® Performance Benefits:

- Eliminates expensive, unsightly and labor-intensive installations of aluminum headers, sills, mounting channels, angle brackets and machine screw anchors
- Install PanelMate® anchors in mere seconds! In concrete, just drill and drive — in wood, no pre-drilling is required
- A fraction of the installed cost of other and more-complicated panel anchoring systems
- Tested to tough Metro Dade County Hurricane Standards (PA202-94 Uniform Static Air Pressure, PA201-94 Impact, and PA203-94 Cyclic Wind Loading)
- One-piece, cold-formed durability
- Galvanic compatibility with dissimilar metals
- Corrosion resistant
- Little or no maintenance compared to other anchoring systems

Product Information

PanelMate® Storm Panel Anchoring System

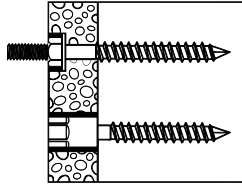


PANELMate®
Storm Panel Anchoring System

PanelMate® Installation Instructions

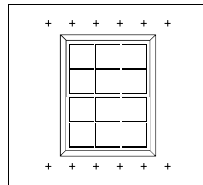
Elco® PanelMate® anchors install faster and easier than other storm protection anchoring products. For concrete and concrete block applications, just drill and drive -- it's that simple! In wood base materials, predrilling is not required!

Full thread engagement in concrete, concrete block and wood base materials is required for optimum performance. Therefore, stucco-faced surfaces will typically require countersinking so that the top of the hex heads of the installed



PanelMate® anchors set flush to the stucco surface, allowing for full thread engagement in the base material (see illustration to right). Use Elco PMD-1 combination bit to drill and countersink in one easy operation. Countersinking will also be necessary in unfaced applications where flush, surface mountings are desired. For ease in attaching panels, male PanelMate® anchors should be installed above openings. Female PanelMate® anchors should be used where flush, non-protruding installations are desired, such as below openings.

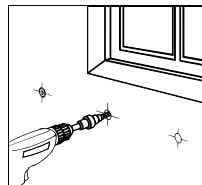
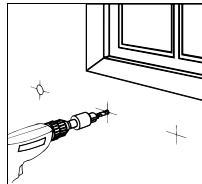
All PanelMate® anchor installations must be compliant with the shutter/panel manufacturer's spacing, alignment and buildout requirements.



Mark PanelMate® anchor installation locations above and below openings.

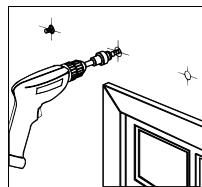
Concrete and Concrete Block Applications

Using a carbide masonry bit (carbide dimension .231" — .237"), contractor-grade hammer drill or other appropriate drilling tool, drill holes at marked locations. Countersink for the hex head of the PanelMate® anchor where required or desired, or use Elco bit PMD-1 to perform the drilling and countersinking operation. With the drill in its drill-only mode, drive the PanelMate® anchors using PanelMate® hex drive tool NY105. The NY105 tool automatically sets the hex heads of PanelMate® anchors flush to the work surfaces.

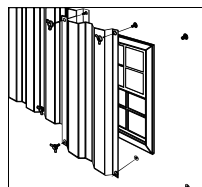


Wood Applications

Countersink where required or desired. Using installation tool NY105, drive PanelMate® anchors directly into wood base materials.

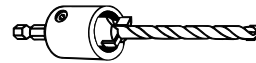


The installed PanelMate® anchors are now ready for attachment of shutters/panels.



PanelMate® Installation Tools

PMD-1 Combination Tool drills and countersinks in one easy operation. Quickly adjusts for use with male or female PanelMate® anchors.

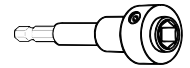


Male Countersinking Position

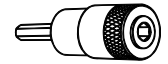


Female Countersinking Position

NY105 Hex Drive Tool automatically sets male and female PanelMate® anchors flush to work surfaces.



NY120 Quick-Change Adapter permits fast and easy changeover of PMD-1 and NY105 tools. Ideal for high-volume installations.



Performance and Technical Data

Testing in Concrete Beam

Compressive Strength = 3323 PSI

TEST	EDGE DISTANCE	EMBEDMENT	ULTIMATE LOAD LBS.
Male PanelMate Anchor			
Pull-out	2.5"	1-3/4"	2176
Shear	2.5"	2"	2269
Female PanelMate Anchor			
Pull-out	2.5"	1-3/4"	2176
Shear	2.5"	1-3/4"	1602

Testing in Concrete Block

Compressive Strength = 1780 PSI

TEST	EDGE DISTANCE	EMBEDMENT	ULTIMATE LOAD LBS.
Male PanelMate Anchor			
Pull Out	2"	1-1/4"	1091
Pull Out	3"	1-1/4"	1050
Shear	2"	1-1/4"	1060
Shear	3"	1-1/4"	1300
Female PanelMate Anchor			
Pull Out	2"	1-1/4"	1091
Pull Out	3"	1-1/4"	1050
Shear	2"	1-1/4"	-
Shear	3"	1-1/4"	994

Testing in Southern Pine Lumber

Specific Gravity = .53

TEST	EDGE DISTANCE	EMBEDMENT	ULTIMATE LOAD LBS.
Pull Out	0.75"	1-7/8"	2632
Shear	3"	1-1/2"	1488
Shear	2"	1-1/2"	1560
Shear	0.75"	1-7/8"	1152

These values are offered only as a guide: therefore, an appropriate safety factor should be applied to these values.

Important Product and Warranty Information!

- As with all cutting tools and fasteners, normal safety precautions should be observed to avoid electrical installations, other utilities and reinforcement bars. Careful use will provide the utmost in safety and reliability.
- The wearing of safety glasses by users and persons in the vicinity is required by Federal Law.
- Complete PanelMate® product information and technical application assistance is available from Elco Construction Products by calling 800.435.7213.

This literature was prepared as a summary of the PanelMate® Storm Panel Anchoring System and is not, therefore, intended to describe all hazards, limitations, warnings, precautions, etc., pertaining to the use of the product. The information and data presented herein are believed to be accurate and reliable, however, due to the wide variety of possible intervening factors, the suitability of the product for the use intended is the sole responsibility of the user. Specifications and other information contained herein supersede all previously published material and are subject to change without notice.

All PanelMate® anchors are warranted to be manufactured free from defects in material and workmanship. Under this warranty, Textron Fastening Systems will provide, at no charge, replacement product for any PanelMate® anchor proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable for this product. This warranty is in lieu of any and all warranties, express or implied, and in no case will Textron Fastening Systems be liable for incidental, liquidated or consequential damages.

TEXTRON Fastening Systems
Commercial Solutions

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