



POLYFAST®

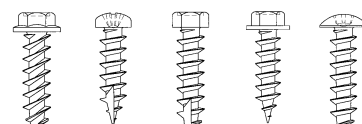
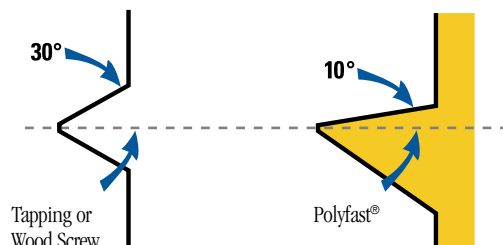
EXCEPTIONAL PERFORMANCE AND VERSATILITY... THE POLYFAST® WAY

Polyfast® fasteners are unique thread designs which provide exceptional performance in both plastic and particle board applications. The asymmetrical thread form and low root diameter provide lower installation torque and very efficient fastening. In plastics, this thread design minimizes radial stresses and excessive material displacement, which increases the potential for material cracking. The wide spaced threads of the Polyfast® design allow for additional material to flow between the threads, resulting in higher resistance to pullout forces.

DESIGN & PERFORMANCE

- Slim root diameter and low angle of thread reduces installation (drive) torque required.
- Minimizes radial stresses generated during thread forming.
- Asymmetrical thread form efficiently maintains clamp load, while minimizing the radial stresses generated.
- High thread profile and unique thread form provide greater surface area on the thread flank for load distribution.
- Large pitch and high thread profile maximizes resistance to pull-out forces.
- Round body design eliminates areas of high stress relative to the fasteners overall cross-section.
- Gimlet point designs provide unique fade out thread for optimum starting of the fastener.

POLYFAST® — ASYMMETRICAL THREAD

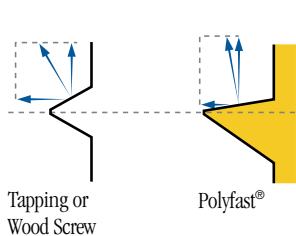


THE CHOICE IS YOURS

- Exceptional performance in plastic and high density particle board.
- Asymmetrical or symmetrical thread designs.
- Blunt or Gimlet point configuration.
- Inch or metric.
- Shank slotted for certain applications.
- Full line of licensed drive systems.

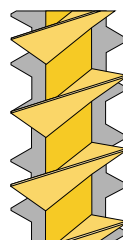
THERE IS NO COMPARISON

Polyfast vs. Wood, Tapping, Thread Cutting Screws



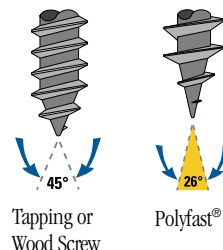
45° Thread Angle

- Slices cleanly
- Less material distortion
- Minimizes splitting



Slim Root Diameter

- Minimal material displacement
- Greater pullout resistance
- Low installation torque
- Higher strip out torque



26° Point Angle

- Easier starting
- Fadeout thread
- Minimal end load



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POLYFAST®

POLYFAST® FASTENERS

The plastics fastener with all the advantages.

Polyfast® screws are through hardened for greater strength and uniform ductility. They are available in threaded lengths from 1/4 to 3 3/4 inches and #2 to #12 diameters. Other diameter and lengths available on request.

DIMENSIONS AND SPECIFICATIONS

| Screw Size | A Major Diameter (in) | B Minor Diameter (in) | Head Size | |
|------------|--------------------------------|--------------------------------|-------------|---------|
| | | | Flat & Oval | Other * |
| #4 - 16 | .117-.108 | .063 | No. 4 | No. 3 |
| #6 - 13 | .144-.135 | .078 | No. 6 | No. 5 |
| #8 - 11 | .170-.160 | .089 | No. 8 | No. 6 |
| #10 - 9 | .196-.186 | .102 | No. 10 | No. 8 |
| #12 - 9 | .223-.213 | .128 | No. 12 | No. 10 |

* Other — Pan, Truss, Hex, Hex Washer

POLYFAST® HIGH DRIVE-TO-STRIP RATIO

| Size | Material | Drive (in-lbs) | Strip (in-lbs) | Strip to Drive |
|------|----------|-------------------|-------------------|----------------------|
| #4 | NYLON | 2.4 | 8.5 | 3.5 |
| | ABS | 2.4 | 10.7 | 4.4 |
| | DELTRIN® | 2.7 | 9.1 | 3.3 |
| | PVC | 2.9 | 10.6 | 3.6 |
| | LEXAN® | 4.3 | 10.3 | 2.4 |
| #6 | NYLON | 5.0 | 17.8 | 3.5 |
| | ABS | 5.1 | 17.7 | 3.4 |
| | DELTRIN® | 4.7 | 17.3 | 3.6 |
| | PVC | 4.4 | 17.9 | 4.0 |
| | LEXAN® | 5.4 | 20.1 | 3.7 |
| #8 | NYLON | 7.1 | 28.7 | 4.0 |
| | ABS | 7.7 | 26.3 | 3.4 |
| | DELTRIN® | 8.4 | 31.8 | 3.7 |
| | PVC | 6.6 | 32.3 | 4.8 |
| | LEXAN® | 8.6 | 37.8 | 4.4 |
| #10 | NYLON | 10.0 | 45.0 | 4.5 |
| | ABS | 9.2 | 42.5 | 4.6 |
| | DELTRIN® | 10.1 | 45.2 | 4.4 |
| | PVC | 8.0 | 39.6 | 4.9 |
| | LEXAN® | 9.8 | 46.7 | 4.7 |
| #12 | NYLON | 14.2 | 65.7 | 4.8 |
| | ABS | 9.4 | 54.8 | 5.8 |
| | DELTRIN® | 14.0 | 63.6 | 4.5 |
| | PVC | 8.0 | 50.8 | 6.3 |
| | LEXAN® | 8.96 | 62.0 | 6.9 |

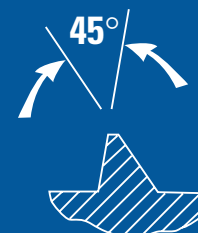
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Lexan is a registered trademark of General Electric Company.

THREAD ENGAGEMENT REQUIREMENTS

| Screw Size | Hole Diameter (inches) for Thread Engagement of: | | | | | | | | | | |
|------------|--|------|------|------|------|------|------|------|------|------|------|
| | 100% | 95% | 90% | 85% | 80% | 75% | 70% | 65% | 60% | 55% | 50% |
| #4 - 16 | .063 | .066 | .068 | .071 | .073 | .076 | .078 | .081 | .083 | .086 | .088 |
| #6 - 13 | .078 | .081 | .084 | .087 | .090 | .094 | .097 | .100 | .103 | .106 | .109 |
| #8 - 11 | .089 | .093 | .097 | .100 | .104 | .108 | .112 | .116 | .119 | .123 | .127 |
| #10 - 9 | .103 | .107 | .112 | .116 | .121 | .125 | .129 | .134 | .138 | .143 | .147 |
| #12 - 9 | .128 | .133 | .137 | .141 | .146 | .151 | .155 | .160 | .164 | .169 | .173 |



Detail of Thread Form



Semblex