

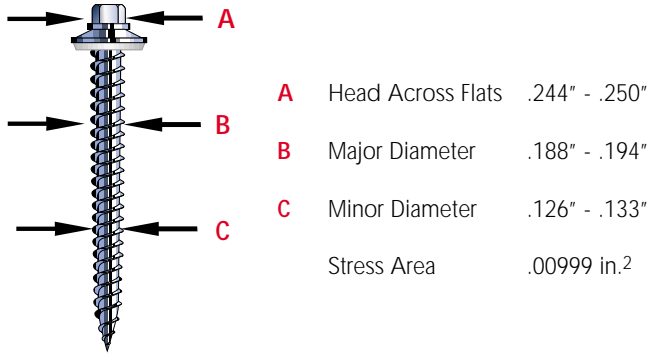


MASTER GRIPPERS™ TECHNICAL DATA

CARBON STEEL & 300 SERIES STAINLESS STEEL

#10 MASTER GRIPPER

DIMENSIONAL PROPERTIES

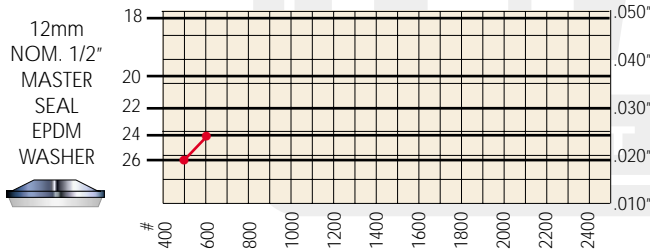


STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

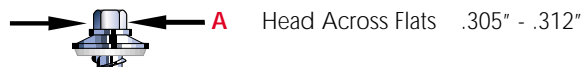
	Carbon	300 Stainless
Minimum Tensile Strength	2350 lbs.	1650 lbs.
Minimum Torsional Strength	65 in.-lbs.	50 in.-lbs.
Minimum Shear Strength	1460 lbs.	990 lbs.

PULL-OVER STRENGTH



REFER TO PAGE 8 FOR
PULL-OUT STRENGTH TECHNICAL DATA

#12 MASTER GRIPPER & #12 STITCH SCREW



FOR MECHANICAL PROPERTIES PLEASE REFER TO
#12 INFORMATION ON PAGE 5

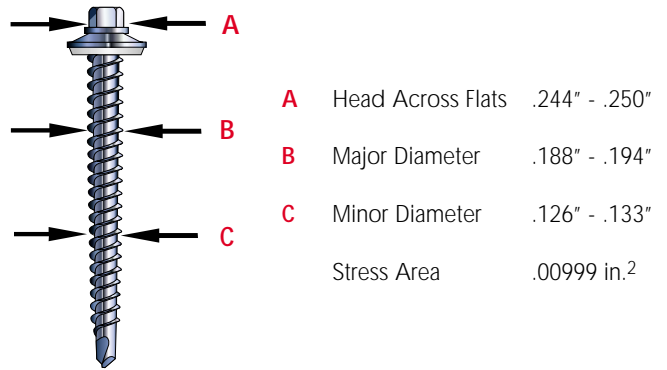
#10 NYLON HEADED MASTER GRIPPER

FOR MECHANICAL PROPERTIES PLEASE REFER TO
#10 INFORMATION ON THIS PAGE

CARBON STEEL & 410 SERIES STAINLESS STEEL

#10 MASTER GRIPPER MINI DRILL POINT

DIMENSIONAL PROPERTIES



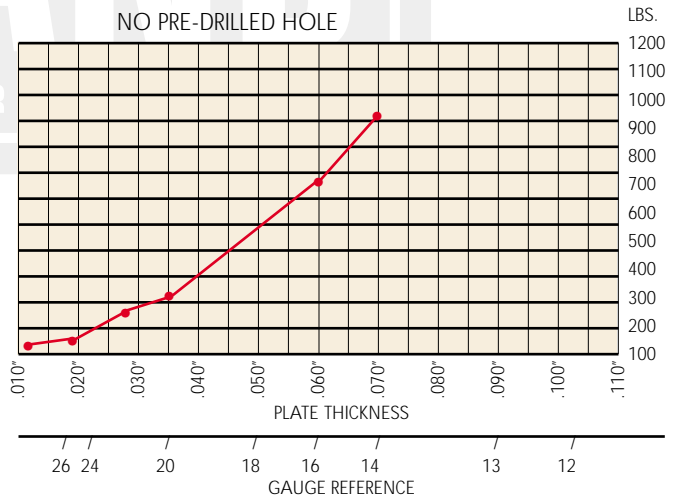
STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

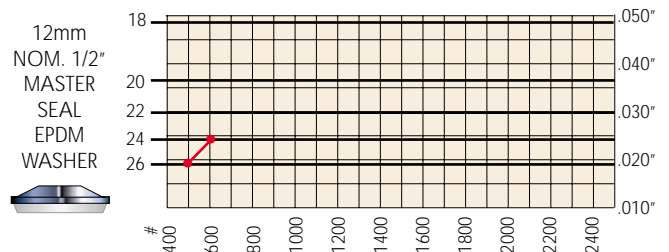
	Carbon	410 Stainless
Minimum Tensile Strength	2350 lbs.	3040 lbs.
Minimum Torsional Strength	65 in.-lbs.	105 in.-lbs.
Minimum Shear Strength	1460 lbs.	1820 lbs.

PULL-OUT STRENGTH

Expected pull-out strength from lab test per specified
test plate thickness (70-85 R_p)



PULL-OVER STRENGTH



SHEAR STRENGTH - SEE INSIDE BACK COVER

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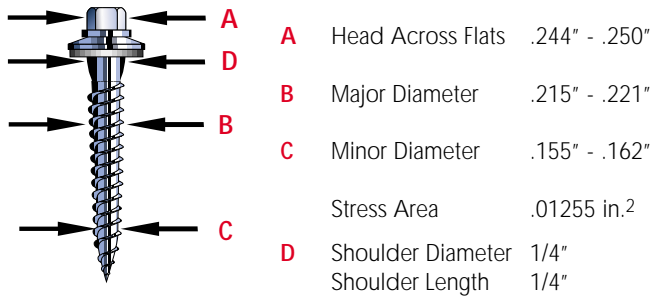
All test results and suggestions are based on laboratory tests. Specific job site conditions should be taken into consideration when specifying the proper fasteners. Because applications vary, we assume no liability for use of this information.



MASTER GRIPPERS™ TECHNICAL DATA

#12-11 MASTER GRIPPER DIAPHRAM

DIMENSIONAL PROPERTIES

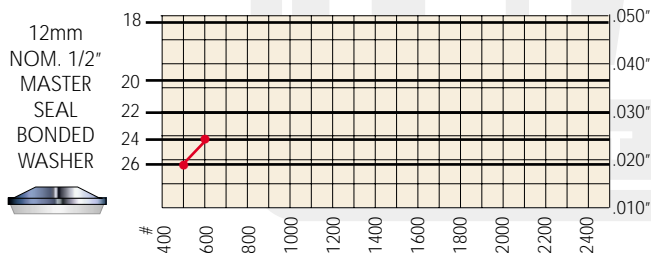


STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

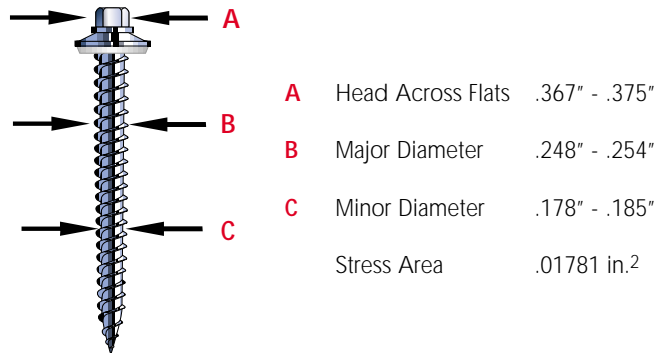
Minimum Tensile Strength	3500 lbs.
Minimum Torsional Strength	90 in.-lbs.
Minimum Shear Strength	2100 lbs.

PULL-OVER STRENGTH



#14-10 MASTER GRIPPER

DIMENSIONAL PROPERTIES

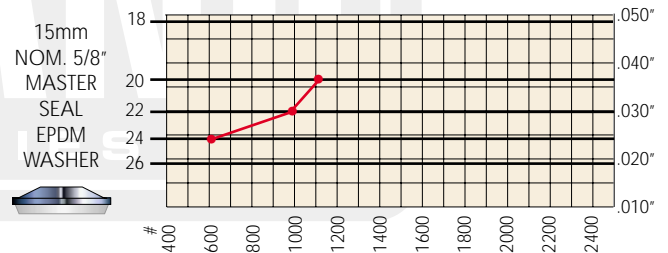


STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

Minimum Tensile Strength	4300 lbs.
Minimum Torsional Strength	156 in.-lbs.
Minimum Shear Strength	2580 lbs.

PULL-OVER STRENGTH



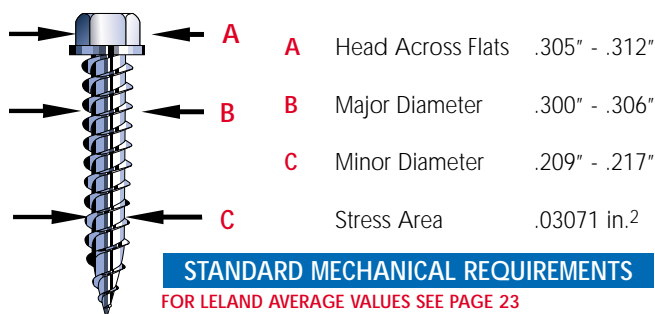
REFER TO PAGE 8 FOR PULL-OUT STRENGTH TECHNICAL DATA

SHEAR STRENGTH - SEE INSIDE BACK COVER

HEAVY DUTY MASTER GRIPPERS - UNASSEMBLED

#18-9 x 1-5/8" & 2-1/2" MASTER GRIPPER

DIMENSIONAL PROPERTIES



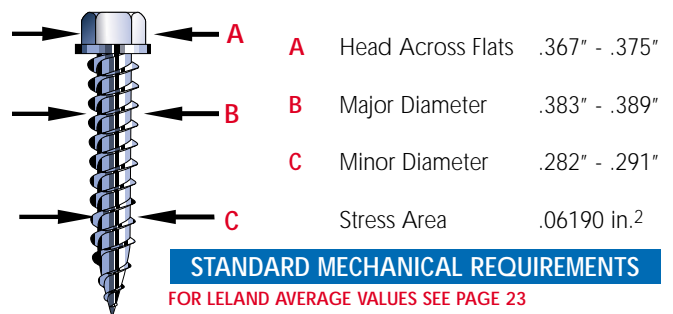
STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

Minimum Tensile Strength	4550 lbs.
Minimum Torsional Strength	250 in.-lbs.
Minimum Shear Strength	2570 lbs.

#24-9 x 1" & 2" MASTER GRIPPER

DIMENSIONAL PROPERTIES



STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

Minimum Tensile Strength	10766 lbs.
Minimum Torsional Strength	640 in.-lbs.
Minimum Shear Strength	6460 lbs.

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MASTER GRIPPERS™ TECHNICAL DATA

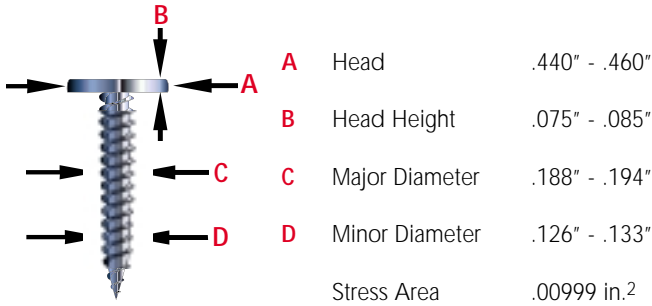
LOW PROFILE PANCAKE HEADS



CARBON STEEL & 300 SERIES STAINLESS STEEL

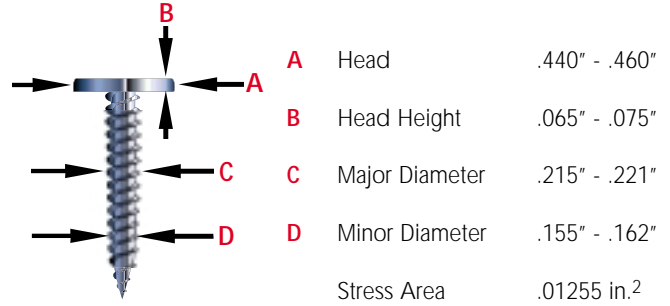
#10 MASTER GRIPPER

DIMENSIONAL PROPERTIES



#12 MASTER GRIPPER

DIMENSIONAL PROPERTIES



STANDARD MECHANICAL REQUIREMENTS

FOR LELAND AVERAGE VALUES SEE PAGE 23

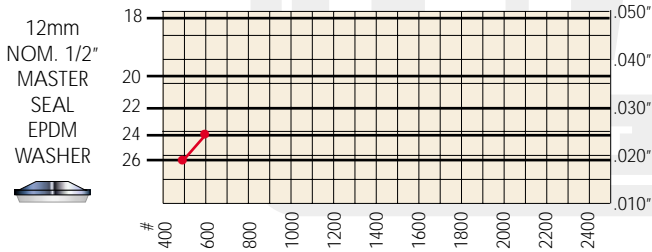
	Carbon	300 Stainless
Minimum Tensile Strength	2350 lbs.	1650 lbs.
Minimum Torsional Strength	65 in.-lbs.	50 in.-lbs.
Minimum Shear Strength	1460 lbs.	990 lbs.

STANDARD MECHANICAL REQUIREMENTS

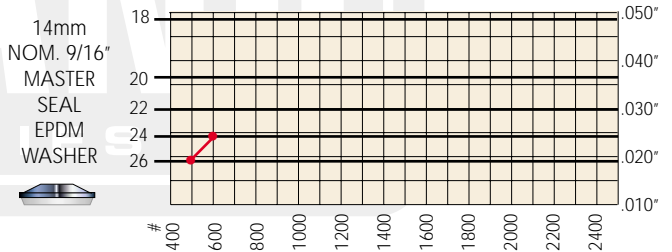
FOR LELAND AVERAGE VALUES SEE PAGE 23

	Carbon	300 Stainless
Minimum Tensile Strength	3500 lbs.	2290 lbs.
Minimum Torsional Strength	90 in.-lbs.	60 in.-lbs.
Minimum Shear Strength	2100 lbs.	1370 lbs.

PULL-OVER STRENGTH



PULL-OVER STRENGTH



REFER TO PAGE 8 FOR PULL-OUT STRENGTH TECHNICAL DATA

SHEAR STRENGTH - SEE INSIDE BACK COVER



APPLIED OVER JS500
EXCEEDS 50 CYCLES

in Kesternich (2 litre SO₂ per cycle)
testing and 3000 hours Salt Spray
with
NO RED RUST

WHAT IS POWDER COATING ?

POWDER COATING is an advanced method of applying a decorative, protective, color finish to fasteners for construction and industry. The powder used for the process is a mixture of finely ground particles of pigment and resin which is sprayed onto a surface to be coated. The charged particles adhere to the electrically grounded surfaces until heated and fused into a smooth coating.

Leland's powder coating is applied so it protects under the head and will not crack even if the washers are overdriven and bent.

The result: a uniform, durable, high quality, attractive finish with **NO RED RUST**.

ADVANTAGES

Resists chipping, scratching & fading
Virtually unlimited color selection
Colors stay bright & vibrant

BENEFITS

- Long lasting, durable finish
- Matches any panel color
- Fasteners last the life of your panel

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