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Providing engineered solutions

Captive Screws from Clarendon Specialty Fasteners

Captive Screws, designed and manufactured by Clarendon Specialty Fasteners, offer the ability to captivate screws to a panel, structure, vehicle or machine guard and can be used across a variety of industry sectors including Aerospace, Defence and Industrial.



Having the ability to captivate screws to a panel or structure prevents the loss of fasteners during any maintenance operations, reduces downtime and simplifies the process.

KEY BENEFITS:

- Manufactured in the UK by Clarendon Specialty Fasteners to AS 9100
- UK, European & US sourced material with full traceability.
- Lot traceable, material certification, PPAP, & FAIRS available
- Designed to aid compliance with the EU machine safety directive 2006/42/EC
- Prevents loss of fasteners during maintenance operations
- Reduces Foreign Object Damage (FOD)
- Reduces inventory count
- Eliminates downtime due to lost components



Configuration Options

Captive Screws, by Clarendon Specialty Fastener are available in many configurations, with multiple options such as head styles, drives, grommets, captivation methods, spring eject, diameter, length, materials and plating. In addition to our extensive range detailed in the Captive Screw Product Guide, Clarendon Specialty Fasteners can offer bespoke designs to meet exact application requirements. Please contact us to discuss any bespoke requirements.



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Reference	Illustration	Head Style	Material	Captivation Style	Spring Eject	Installation Page
<u>501-MX</u>		9	Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	
<u>502-MX</u>		*	Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	SNAP-IN P1 SNAP-IN P2 SNAP-IN P3
<u>503-MX</u>			Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	
<u>521-MX</u>		٢	316 St/Steel	SWAGED	NO	SWAGED-IN P1
<u>522-MX</u>			316 St/Steel	SWAGED	NO	SWAGED-IN P2
<u>541-MX</u>		9	316 St/Steel	RETAINER NUT	YES	RETAINER NUT
003-1019-XXX (For use with 541-MX)			316 St/Steel	RETAINER NUT	N/A	
<u>561-MX</u>			316 St/Steel	REDUCED SHANK	NO	REDUCED SHANK
003-168-MX (For use with 561-MX)		0	316 St/Steel	REDUCED SHANK	NO	REDUCED SHANK & WASHER

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METRIC INDEX

METRIC INDEX

Specialty Fasteners

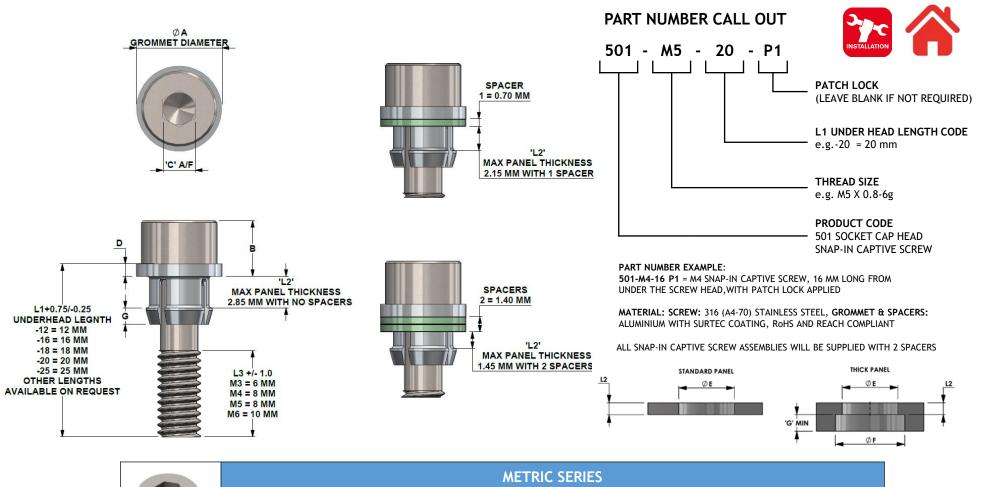
Reference	Illustration	Head Style	Material	Captivation Style	Spring Eject	Installation Page
<u>601-XXX</u>			Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	
<u>602-XXX</u>		200	Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	SNAP-IN P1 SNAP-IN P2 SNAP-IN P3
<u>603-XXX</u>			Screw: 316 St/Steel Grommet: Aluminium	SNAP-IN	NO	
<u>621-XXX</u>		٢	316 St/Steel	SWAGED	NO	SWAGED-IN P1
<u>622-XXX</u>			316 St/Steel	SWAGED	NO	<u>SWAGED-IN P2</u>
<u>641-XXX</u>		9	316 St/Steel	RETAINER NUT	YES	
003-1019-XXX (For use with 641-XXX)			316 St/Steel	RETAINER NUT	N/A	<u>RETAINER NUT</u>

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Specialty Fasteners larendon INCH INDEX



		METRIC SERIES											
3			Thread	А	В	с	D	PANEL PREP		G			
	Part Number	Min L1				_		E	F	_			
			Class 6g	Grommet Diam	Head + Flange HT	A/F Recess	Flange HT	Hole	C/Bore Diam Min	Snap legs			
	501-M3-L1	12	M3 X 0.5	6.35	3.9	2.5	0.84	4.9 / 4.8	6.4				
	501-M4-L1	16	M4 X 0.7	7.9	5.1	3.0	1.10	5.7 / 5.5	7.1	1.53			
	501-M5-L1	20	M5 X 0.8	9.1	6.5	4.0	1.47	6.5 / 6.3	7.9	1.55			
	501-M6-L1	20	M6 X 1.0	10.6	7.5	5.0	1.47	8.1 / 7.9	9.5				
	HEAD DIMENS	HEAD DIMENSIONS TO BS EN ISO 4762						ROLLED THREAD TO BS 3643					

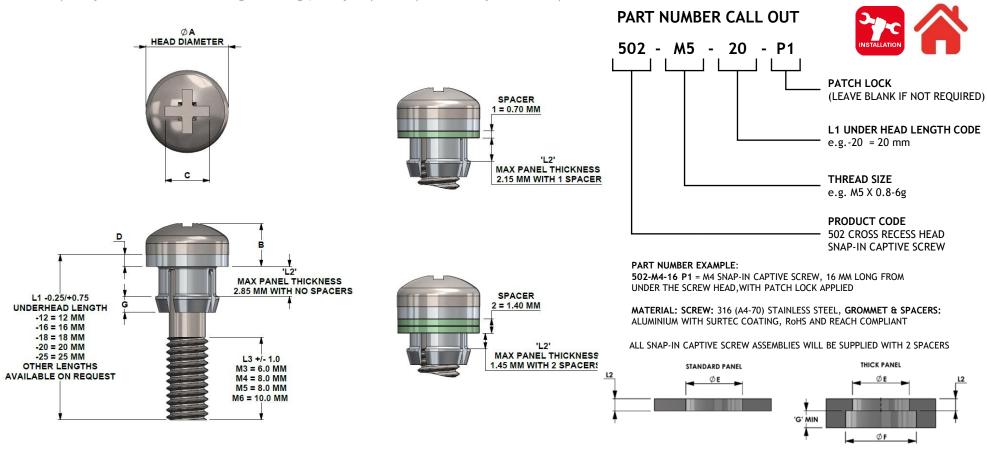
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501 METRIC SNAP-IN SOCKET CAP HEAD CAPTIVE SCREW

501 METRIC SNAP-IN SOCKET

Specialty Fasteners



		METRIC SERIES												
			Thread	A	В	с	D	PANEL PREP		G				
	Part Number	Min L1	Intedd		, , , , , , , , , , , , , , , , , , ,	C	U	E	F	0				
			Class 6g	Head Diam	Head + Flange HT	DRIVE	Flange HT	Hole	C/Bore Diam Min	Snap legs				
	502-M3-L1	12	M3 X 0.5	6.0	3.2	1	0.84	4.9 / 4.8	6.4					
	502-M4-L1	16	M4 X 0.7	8.0	4.2	2	1.10	5.7 / 5.5	7.1	1 50				
	502-M5-L1	20	M5 X 0.8	10.0	5.2	2	1.47	6.5 / 6.3	7.9	1.53				
	502-M6-L1	20	M6 X 1.0	12.0	6.1	3	1.47	8.1 / 7.9	9.5					
	Head Dimensions to ISO 7045 Type Z				Rolled Thread to BS 3643				All Dimensions in MM					

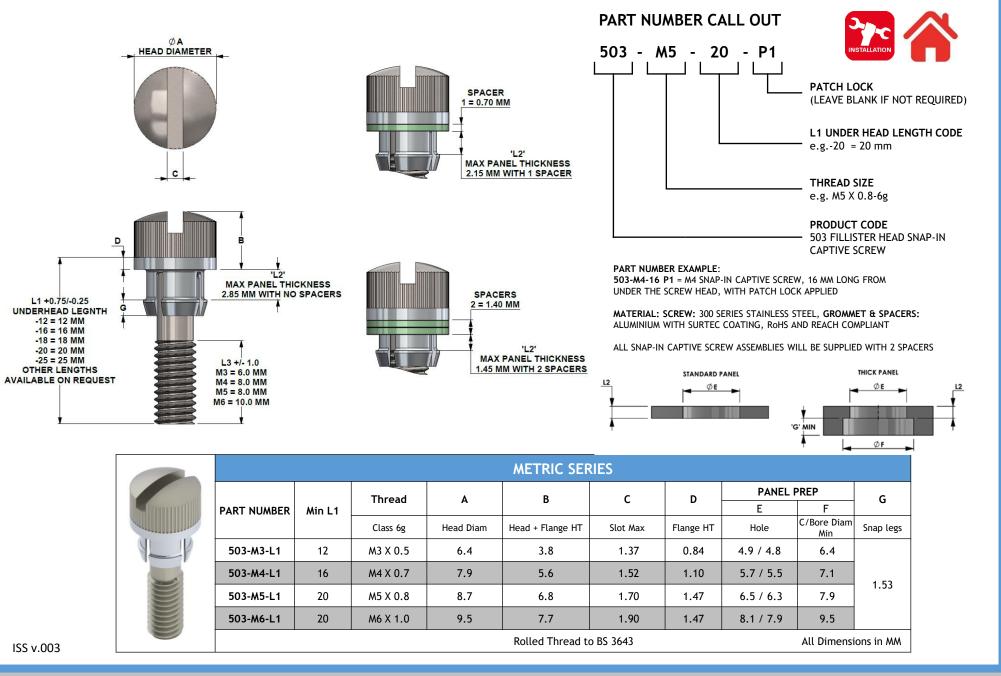
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502 METRIC SNAP-IN CROSS RECESS HEAD CAPTIVE SCREW

502 METRIC SNAP-IN CROSS RECESS HEAD CAPTIVE SCREW

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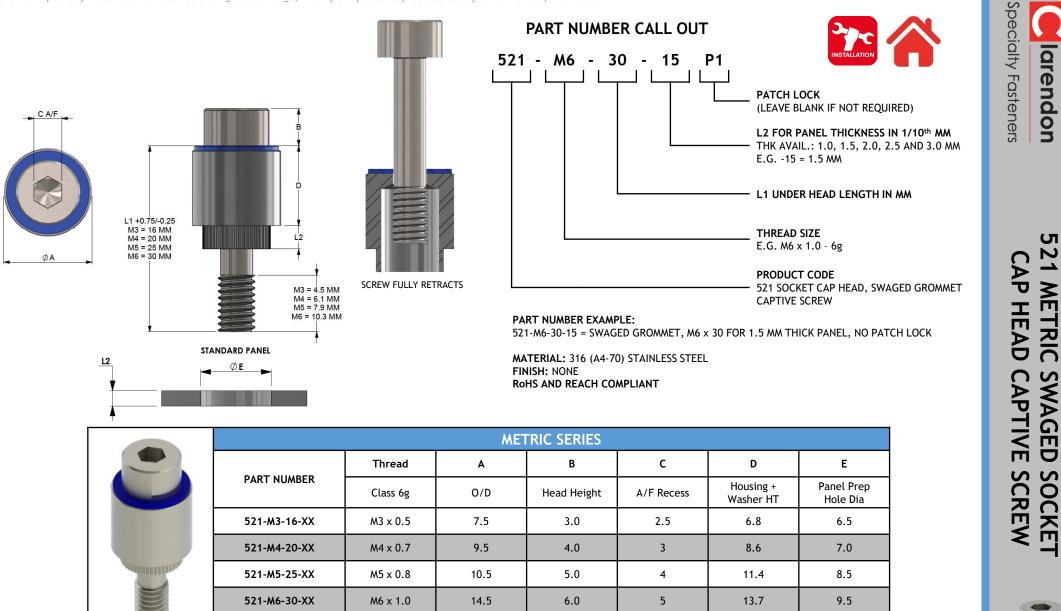
503 METRIC SNAP-IN FILLISTER HEAD CAPTIVE SCREW

503 METRIC SNAP-IN FILLISTER HEAD CAPTIVE SCREW

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Head Dimensions to ISO 4762



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521 METRIC SWAGED SOCKET CAP HEAD CAPTIVE SCREW

Rolled thread to BS 3643

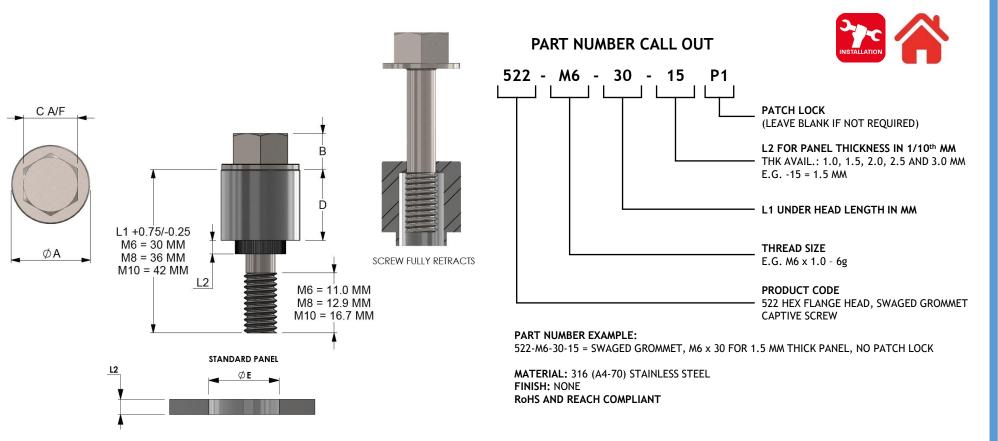
All Dimensions in MM

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METRIC

SWAGED



	METRIC SERIES											
	PART NUMBER	Thread	Α	В	С	D	E					
		Class 6g	O/D	Head Height	A/F Recess	Housing	Panel Prep Hole Dia					
	522-M6-30-XX	M6 x 1.0	14.5	6.6	10	13	9.5					
	522-M8-36-XX	M8 x 1.25	18.0	8.1	13	16.7	13					
	522-M10-42-XX	M10 x 1.5	22.3	9.2	15	18.5	15.5					
	Rolled thread to BS 3643 All Dimensions in MM											

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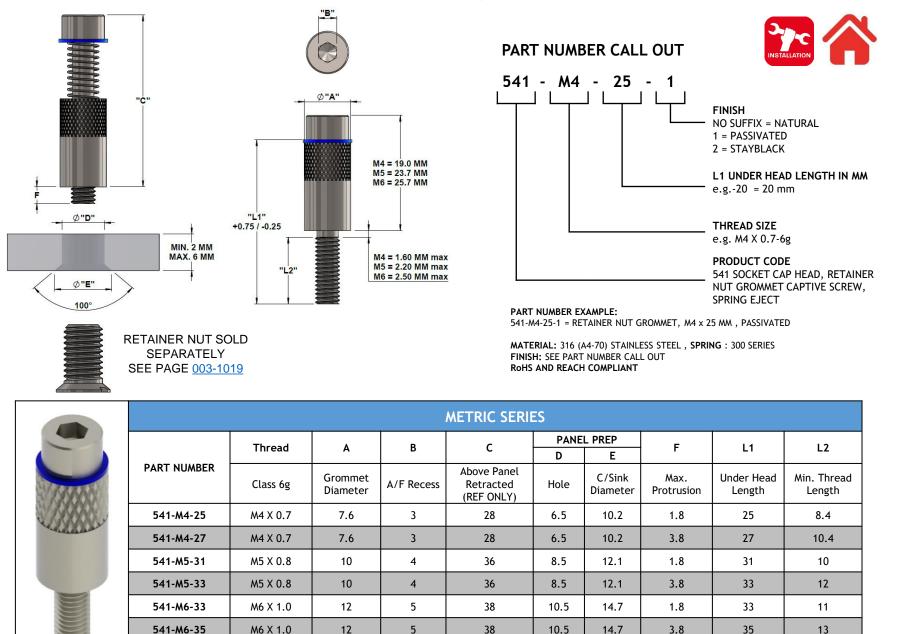


522 METRIC SWAGED HEX FLANGE HEAD CAPTIVE SCREW

522 METRIC SWAGED HEX FLANGE HEAD CAPTIVE SCREW

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Head Dimensions to ISO 4762



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541 METRIC RETAINER NUT SOCKET CAP HEAD CAPTIVE SCREW SPRING EJECT

Rolled Thread to BS 3643

CAP HEAD CAPTIVE SCREW SPRING СЛ **41 METRIC RETAINER NUT SOCKE** ELEC

All Dimensions in MM

Specialty Fasteners

561-M4-XX-XX

561-M5-XX-XX

561-M6-XX-XX

561-M8-XX-XX

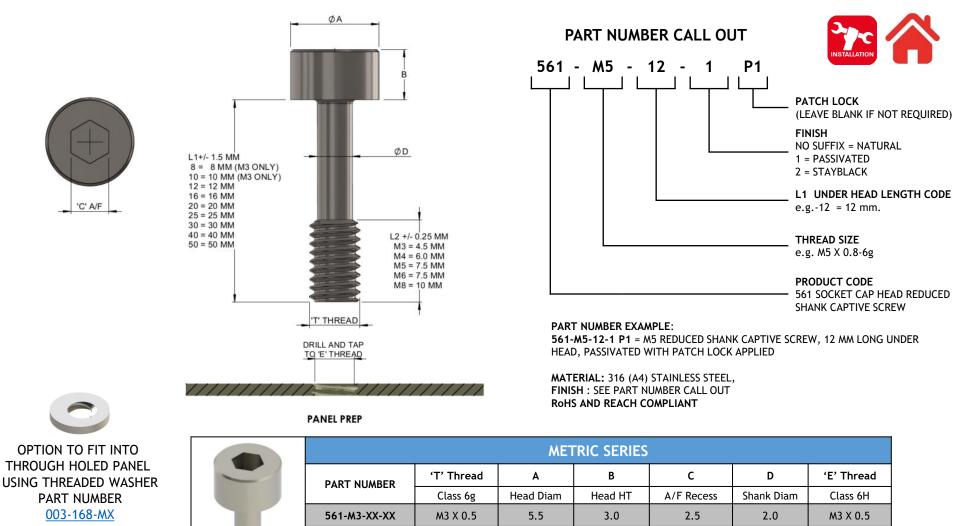
Head Dimensions to ISO 4762

M4 X 0.7

M5 X 0.8

M6 X 1.0

M8 X 1.25





OPTION TO FIT INTO

THROUGH HOLED PANEL

PART NUMBER 003-168-MX

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561 METRIC REDUCED SHANK SOCKET CAP HEAD CAPTIVE SCREW

7.0

8.5

10.0

13.0

4.0

5.0

6.0

8.0

3.0

4.0

5.0

6.0

2.8

3.7

4.2

6.0

M4 X 0.7

M5 x 0.8

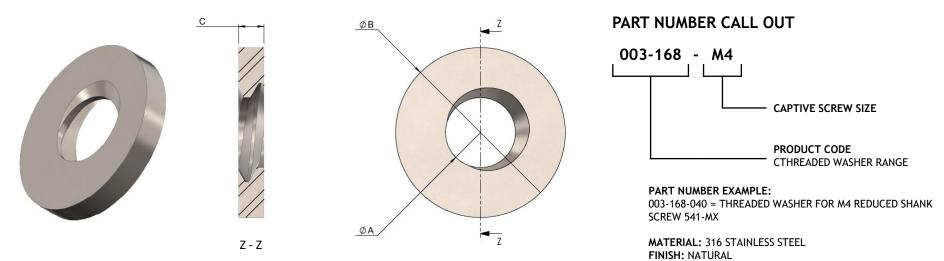
M6 X 1.0

M8 X 1.25

All Dimensions in MM

Specialty Fasteners arendon S OCKET CAP HEAD CAPTIVE SCREW 561 METRIC REDUCED SHANK





	METRIC SERIES									
		А	В	С						
	PART NUMBER	Thread Size	Outer Diameter	Thickness						
	003-168-M3	M3 X 0.65- 6h	6.0	1.0						
	003-168-M4	M4 X 0.7 - 6h	8.0	1.2						
	003-168-M5	M5 X 0.8 - 6h	10.0	1.5						
	003-168-M6	M6 X 1.0 - 6h	12.0	1.6						
	003-168-M8	M8 X 1.25 - 6h	16.0	2.0						
			-	All Dimensions in MM						

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003-168-MX THREADED WASHER FOR METRIC REDUCED SHANK SOCKET CAP HEAD CAPTIVE SCREW

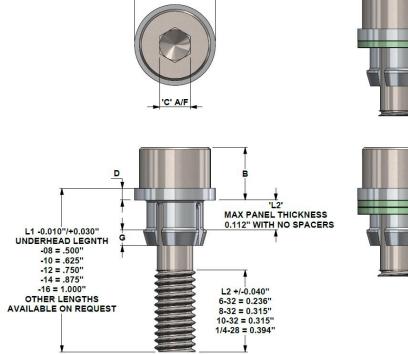
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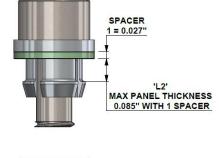
601 INCH SNAP-IN SOCKET CAP HEAD CAPTIVE SCREW

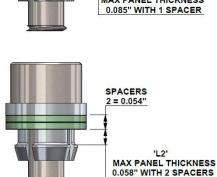
									•	Ø F
					INCH SERIE	S				
3			Thread	А	В	с	D	PANEL PREP		G
	Part Number	Min L1				C	D	E	F	
			Class 2A	Grommet Diam	Head + Flange HT	DRIVE	Flange HT	Hole	C/Bore Min	Snap Legs
	601-632-L1	0.500"	6-32 UNC	0.250"	0.171"	3/32	0.035"	0.190/0.198"	0.235"	
	601-832-L1	0.625"	8-32 UNC	0.311"	0.207"	1/8	0.045"	0.217/0.225"	0.255"	0.060"
	601-132-L1	0.625"	10-32 UNF	0.360"	0.248"	5/32	0.060"	0.249/0.256"	0.320"	0.000
	601-428-L1	0.750"	1/4-28 UNF	0.420"	0.308"	3/16	0.060"	0.312/0.319"	0.355"	
	Head Dimensions to BS 2470			Rolled Thread to BS 1580			All Dimensions in Inches			

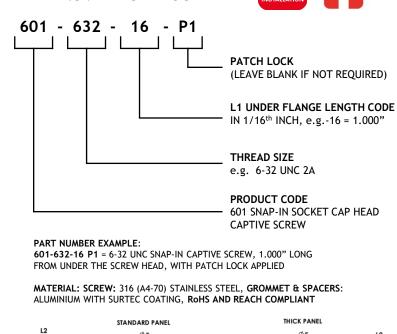


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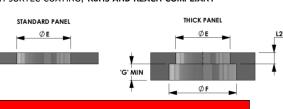
GROMMET DIAMETER







PART NUMBER CALL OUT

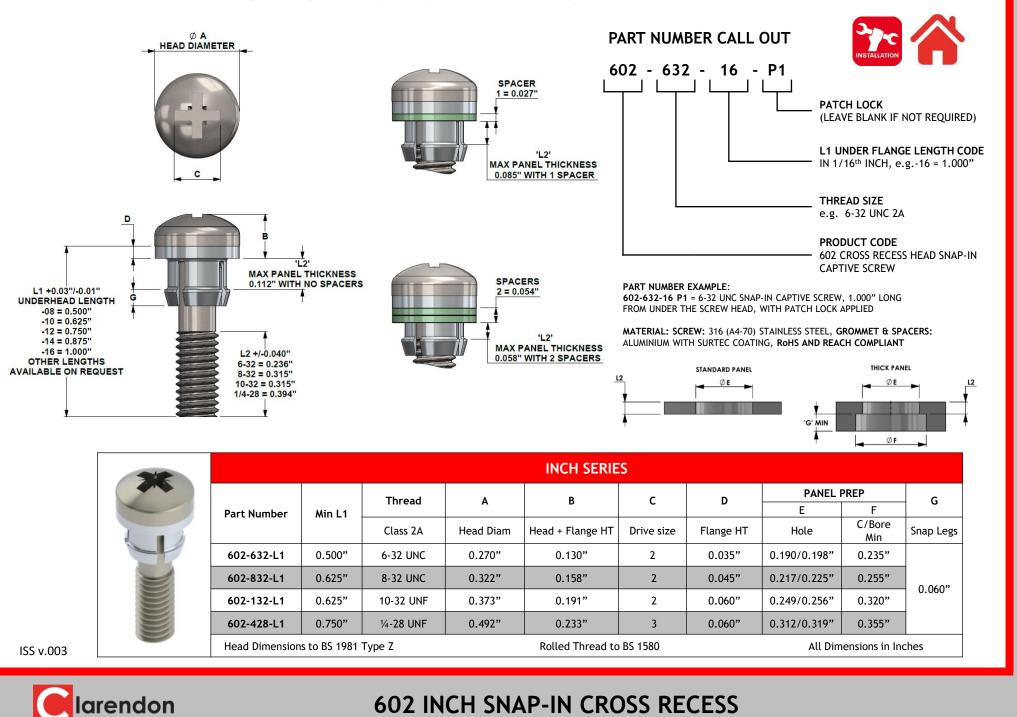






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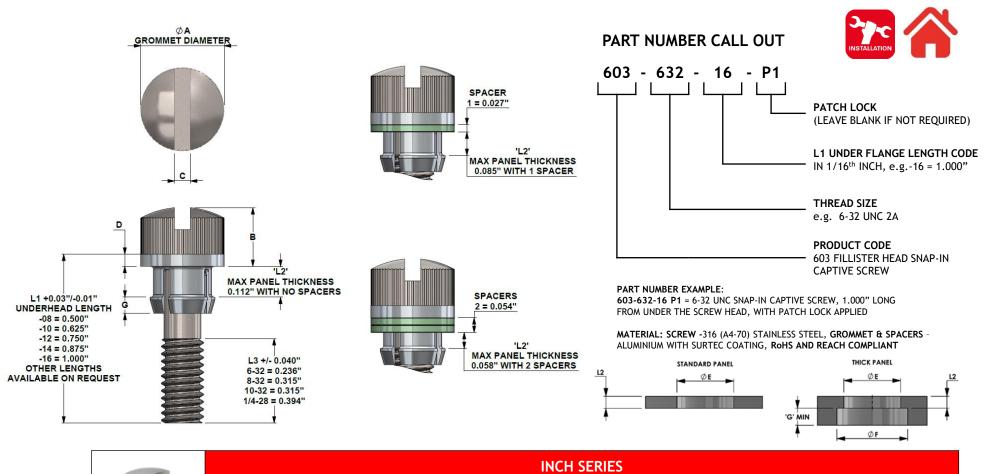
Specialty Fasteners



HEAD CAPTIVE SCREW







	INCH SERIES												
		Thread	А	В	с	D	PANEL PREP		G				
Part Number	Min L1				-		E	F	_				
		Class 2A	Grommet Diam	Head + Flange HT	Slot max	Flange HT	Hole	C/Bore Min	Snap legs				
603-632-L1	0.500"	6-32 UNC	0.250"	0.167"	0.048"	0.035"	0.190/0.198"	0.235"					
603-832-L1	0.625"	8-32 UNC	0.311"	0.201"	0.054"	0.045"	0.217/0.225"	0.255"	0.060"				
603-132-L1	0.625"	10-32 UNF	0.360"	0.240"	0.060"	0.060"	0.249/0.256"	0.320"	0.000				
603-428-L1	0.750"	1/4-28 UNF	0.420"	0.297"	0.075"	0.060"	0.312/0.319"	0.355"					
Head Dimensions to ASME B18.6.3 Knurled				Rolled Thr	ead to BS 158	All Dimensions in Inches							

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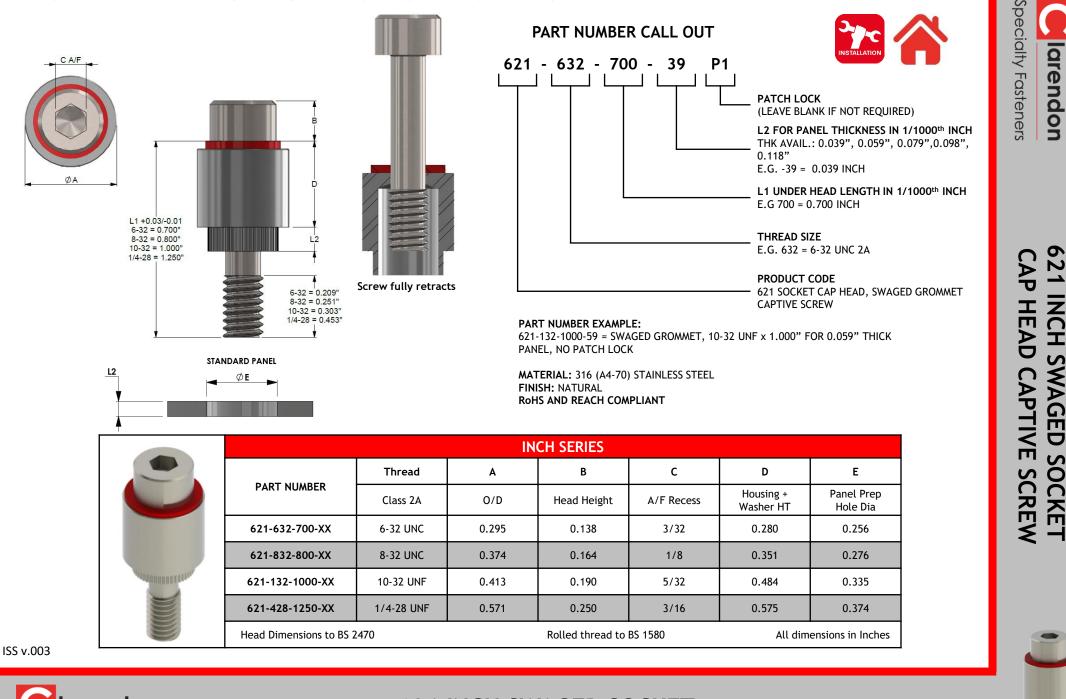


603 INCH SNAP-IN FILLISTER HEAD CAPTIVE SCREW

603 INCH SNAP-IN FILLISTER HEAD CAPTIVE SCREW

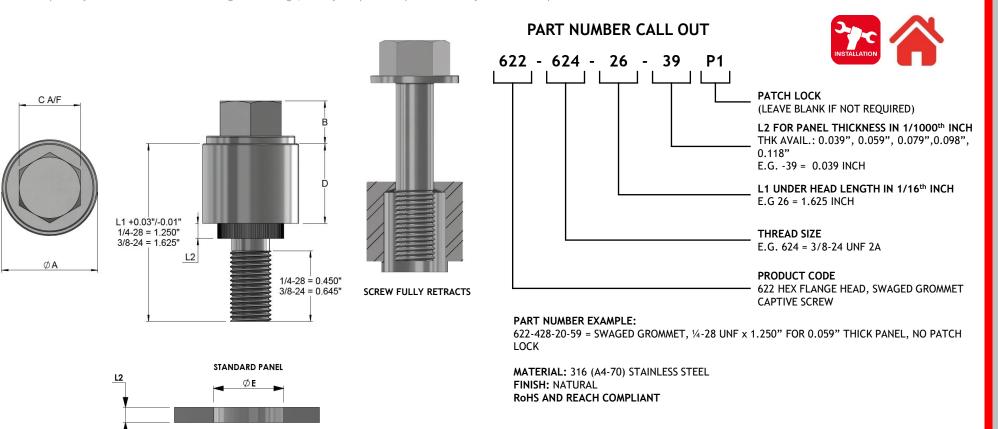
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621 INCH SWAGED SOCKET CAP HEAD CAPTIVE SCREW



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FLANGE

HEAD CAPTIVE SCREW

6

22

INCH SWAGED

HEX

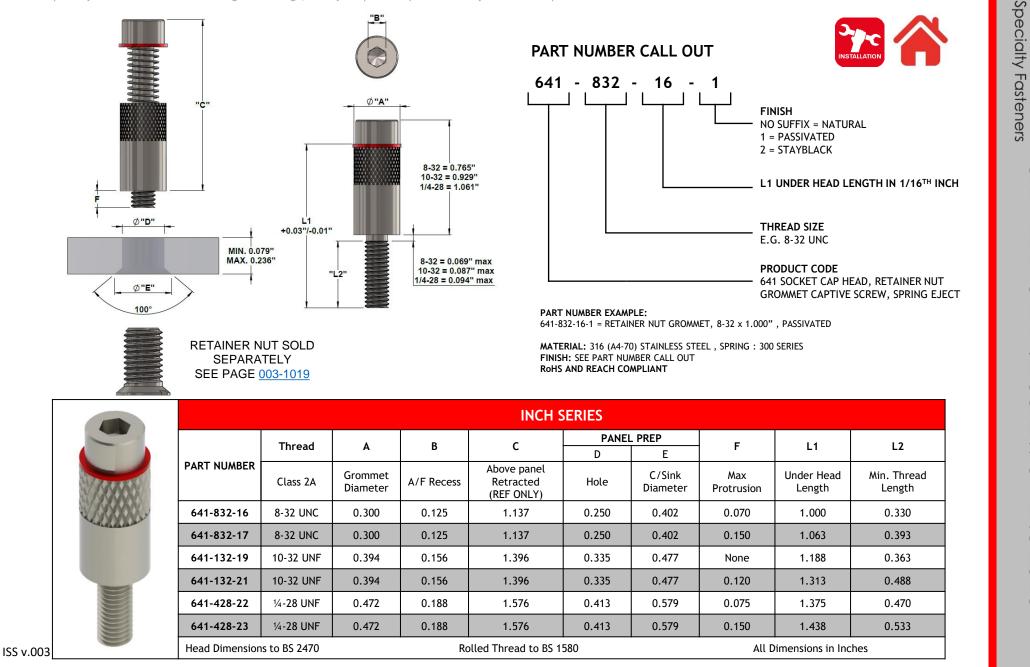
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INCH SERIES										
PART NUMBER	Thread	Α	В	С	D	E				
	Class 2A	O/D	Head Height	A/F	Housing Height	Panel Prep Hole Diam				
622-428-20-XX	1/4-28 UNF	0.571	0.28	3/8	0.512	0.374				
622-624-26-XX	3/8-24 UNF	0.878	0.395	9/16	0.728	0.608				
Rolled thread to BS 1580 All dimensions in Inch										

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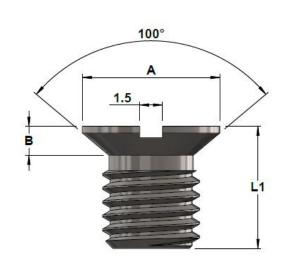
622 INCH SWAGED HEX FLANGE HEAD CAPTIVE SCREW

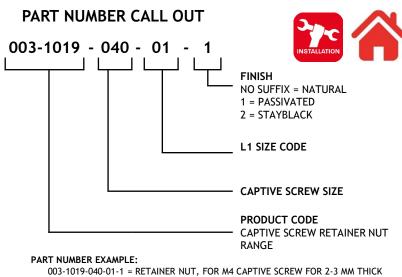




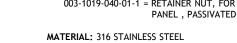
641 INCH RETAINER NUT SOCKET CAP HEAD CAPTIVE SCREW SPRING EJECT

 \square AP HEAD CAPTIVE SCREW SPRING EJEC **41 INCH RETAINER NUT** SOCKET









MATERIAL: 316 STAINLESS STEEL FINISH: SEE PART NUMBER CALL OUT ROHS AND REACH COMPLIANT

	METRIC / INCH SERIES										
	For Captive Screw	or Captive Screw Retainer Nut Part No.		L1	Α	В					
			Panel Thickness	Retainer Nut Length	Head Diameter	Head Height					
	<u>541-M4-XX</u> and <u>641-832-XX</u>	003-1019-040-01	2.0 - 3.0	8.0		1.9					
		003-1019-040-02	3.1 - 4.9	9.5	9.0						
		003-1019-040-03	5.0 - 6.0	11.0							
	541-M5-XX and	003-1019-050-01	2.0 - 3.0	8.0							
		003-1019-050-02	3.1 - 4.9	9.5	11.0	2.4					
	<u>641-132-XX</u>	003-1019-050-03	5.0 - 6.0	11.0							
	541-M6-XX	003-1019-060-01	2.0 - 3.0	8.0							
	and	003-1019-060-02	3.1 - 4.9	9.5	13.5	2.8					
	<u>641-128-XX</u>	003-1019-060-03	5.0 - 6.0	11.0							
			All Dimens	ions in MM							



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003-1019-XXX-XX RETAINER NUT FOR 54X AND 64X SERIES

003-1019-XXX-XX RETAINER NUT FOR 54X AND 64X SERIES

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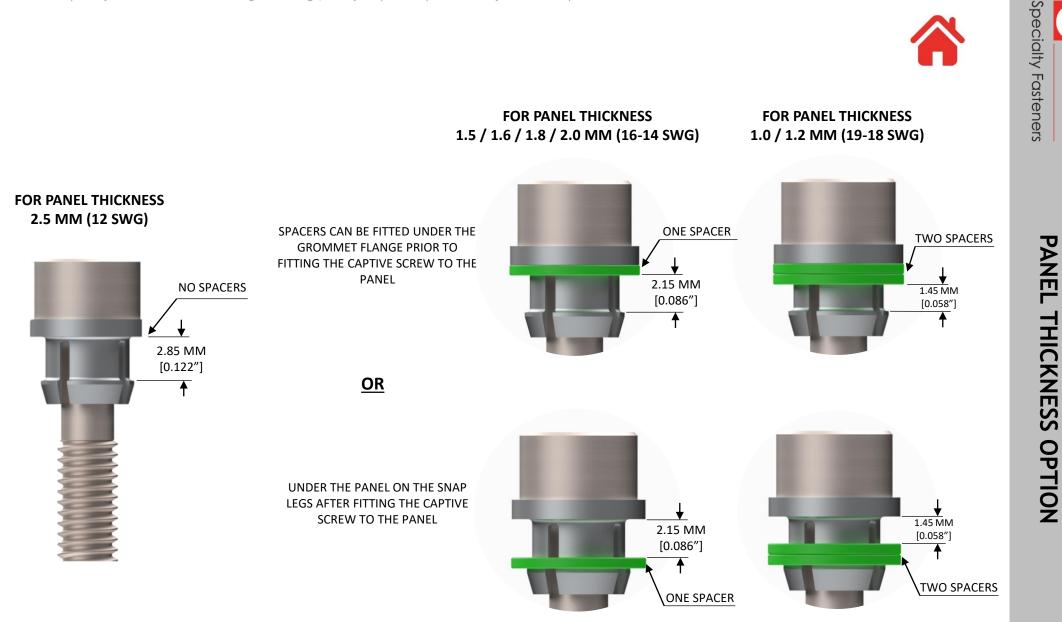


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SNAP-IN

CAPTIVE

SCREW

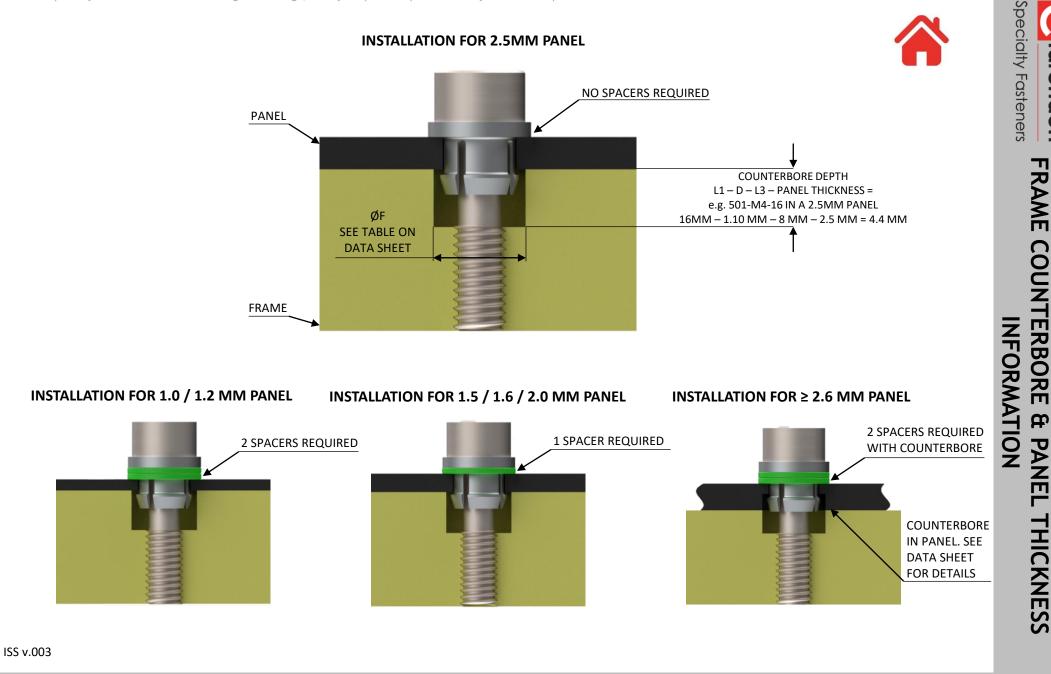


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SNAP-IN CAPTIVE SCREW PANEL THICKNESS OPTION







SNAP-IN CAPTIVE SCREW FRAME COUNTERBORE & PANEL THICKNESS INFORMATION



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SCREW



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SCREW INSTALLATION

SNAP-

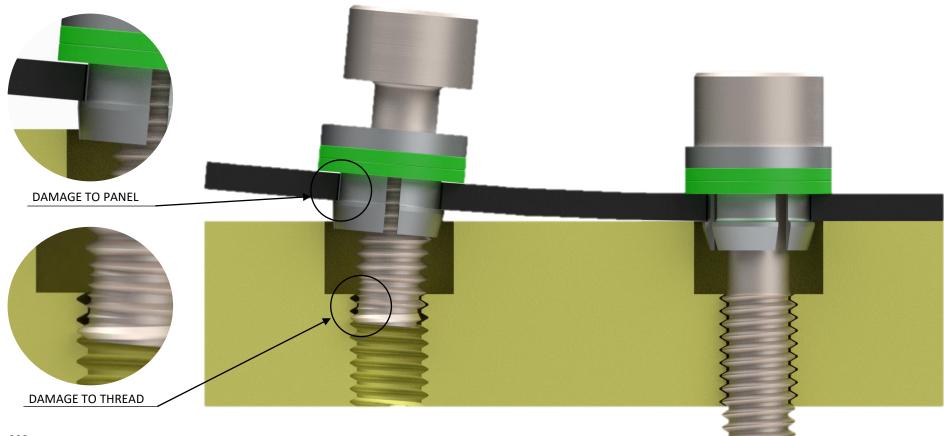
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JACK-OUT DAMAGE

DESTRUCTIVE JACK-OUT FORCES MAY BE ENCOUNTERED WHEN REMOVING A PANEL WHICH USES A NUMBER OF CAPTIVE SCREWS. THIS OCCURS WHEN A SCREW REACHES THE LIMIT OF THE RETRACTION PERMITTED BY THE HOUSING BEFORE THE THREADS ARE FULLY DISENGAGED FROM THE MATING THREADS OF THE FRAME. REMEMBER TO REMOVE THEM GRADUALLY!

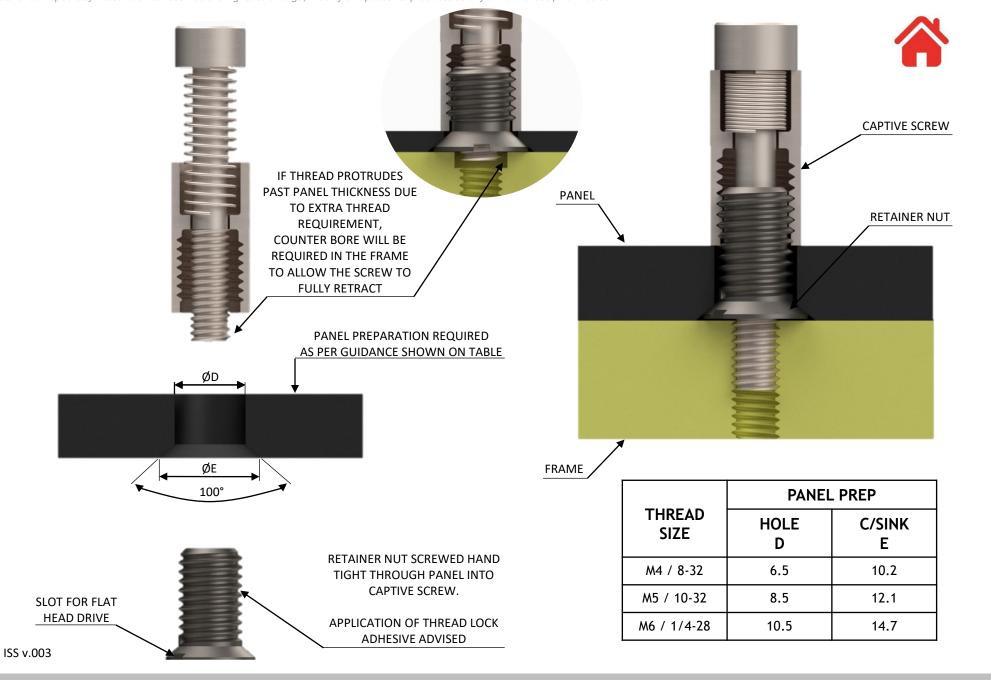


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SNAP-IN CAPTIVE SCREW INSTALLATION





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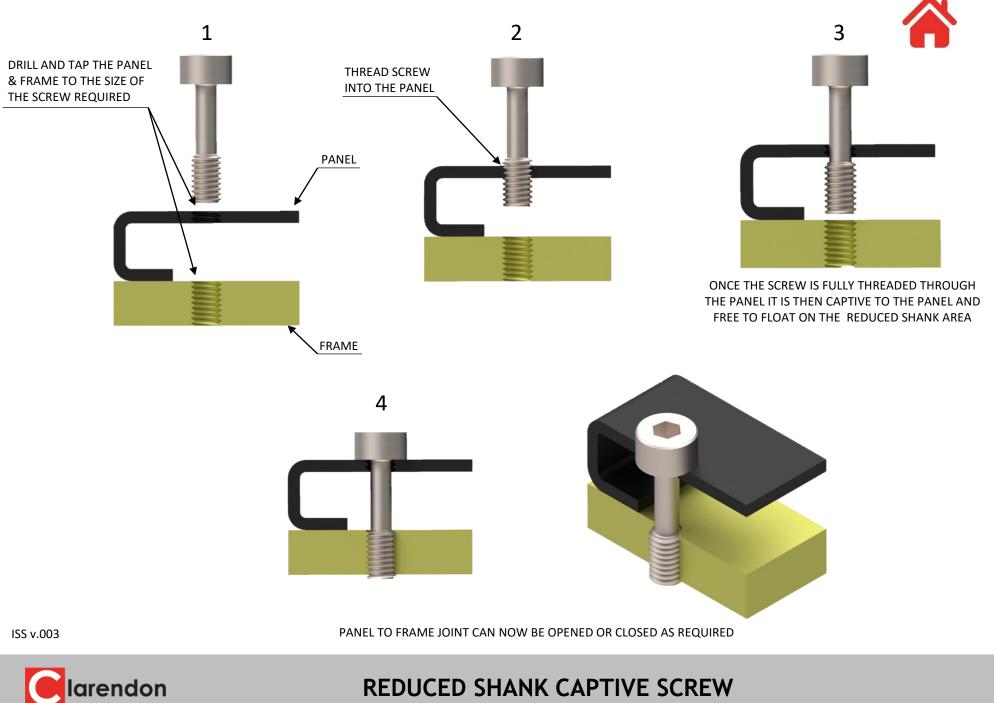
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RETAINER NUT CAPTIVE SCREW INSTALLATION



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REDUCED SHANK CAPTIVE SCREW

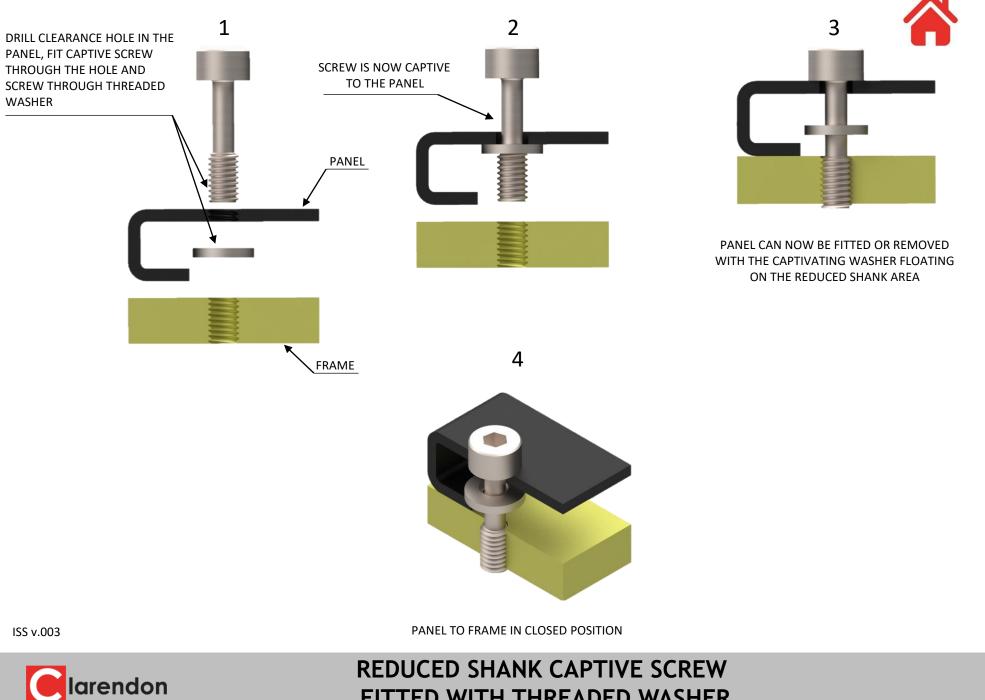
INSTALLATION DETAILS

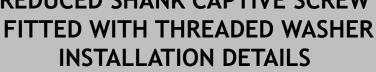
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INSTALLATION DETAILS

Specialty Fasteners



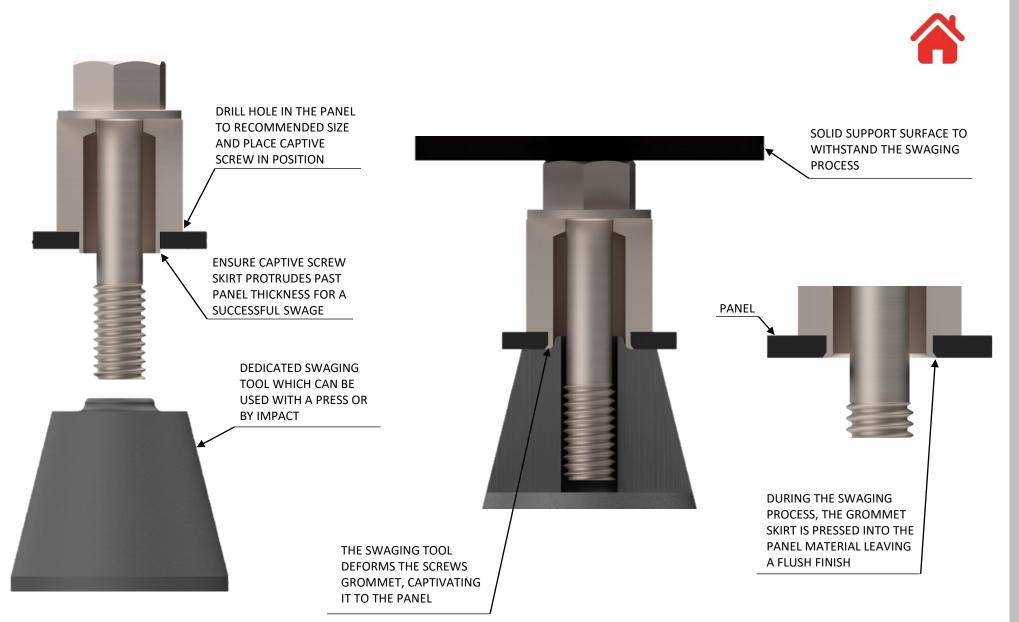




ATION DETAILS

SCREW





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SWAGED CAPTIVE SCREW INSTALLATION DETAILS



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SWAGED

CAPTIVE SCREW

INSTAL

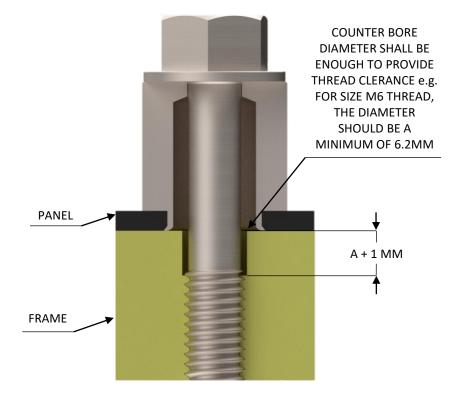
ATION

DETAILS



SWAGED CAPTIVE SCREW INSTALLATION DETAILS

ONCE THE CAPTIVE SCREW IS SWAGED IN POSITION ON THE PANEL, A COUNTER BORE IS THEN REQUIRED TO ALLOW THE THREAD TO FULLY ENGAGE AND CLOSE THE PANEL TO FRAME JOINT CORRECTLY. BY MEASSURING THE DISTANCE FROM THE BOTTOM OF PANEL TO THE BEGINNING OF THE THREAD ("A") AND ADDING 1 MM OF CLEARANCE; THIS WILL GIVE THE COUNTER BORE DEPTH REQUIRED



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SWAGED CAPTIVE SCREW INSTALLATION DETAILS

