



**MUSTAD**

SCREWS TECHNOLOGY

***Panelvit***<sup>®</sup>  
LUBRICATED LUBEX<sup>®</sup>

CHIPBOARD SCREWS  
FOR PROFESSIONAL USE

100% MADE IN ITALY

CE



<b>Manufacturing process</b>	page 3
<b>Quality</b>	page 11
<b>Packaging</b>	page 13
<b>Panelvit® universal screws</b>	page 15
<b>Panelvit® for wood frames</b>	page 34
<b>Panelvit® for furniture</b>	page 44
<b>Panelvit® and Kovervit® for wood constructions</b>	page 54
<b>Assorted cases</b>	page 65
<b>Displays</b>	page 67
<b>Dimensional specifications</b>	page 69



**MUSTAD**  
SPA ITALY

*THE COMPANY*

## **MUSTAD SPA**

- **Made in Italy** since 1912
- One of the **leading** hardened screw **manufacturers in Europe**
- **2 plants** with a total covered surface of over **20,000 m<sup>2</sup>**
- **110 highly skilled workers**
- **30 sales agents**

## **BALANGERO PLANT**

Via S. Anna, 59/21  
10070 Balangero (TO) - ITALY  
Tel. 0123.346625 - 346222 (r.a.)  
Fax 0123.346041  
Website:  
[www.mustad.it](http://www.mustad.it)



## **PINEROLO PLANT**

Registered office:  
via Saluzzo, 66  
10064 Pinerolo (TO) - ITALY  
VAT number:  
IT05801010017  
Tax code:  
09347030158





## PRODUCTION CYCLE

### 1) Wire drawing.

**Carbon steel**  
purchased from  
the best European  
steelworks.



### 2) Cold heading of head and recess.



### 3) Pointing of self-drilling screws.

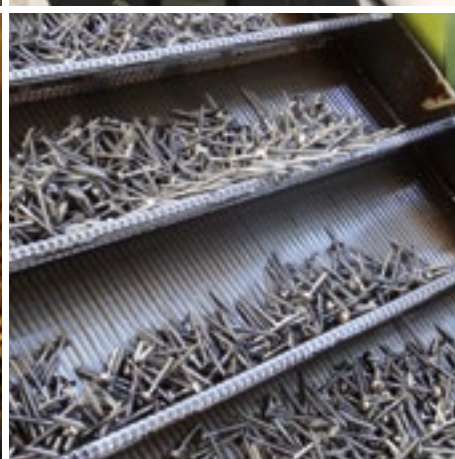


**ENTIRE PRODUCTION CYCLE IN ITALY**

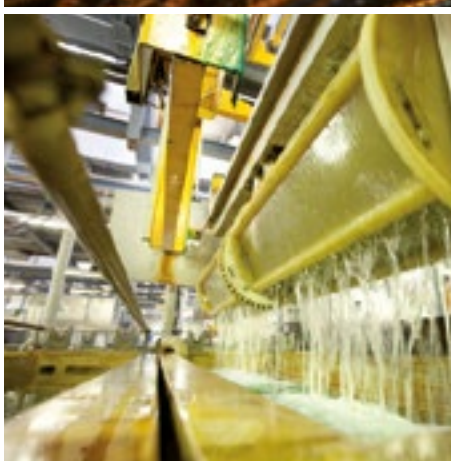
**4) Thread rolling.**



**5) Case hardening treatment.**  
(see page 7)



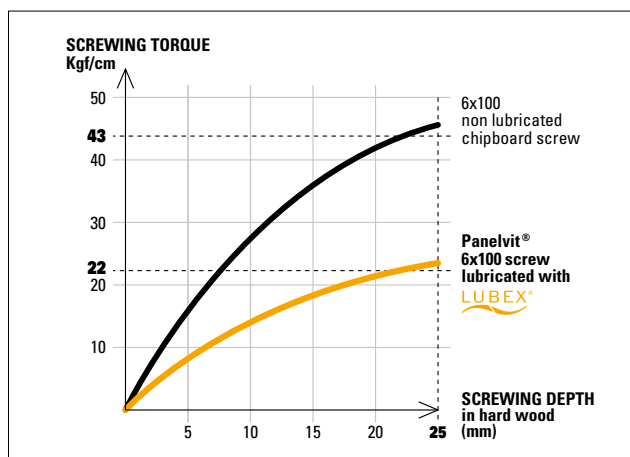
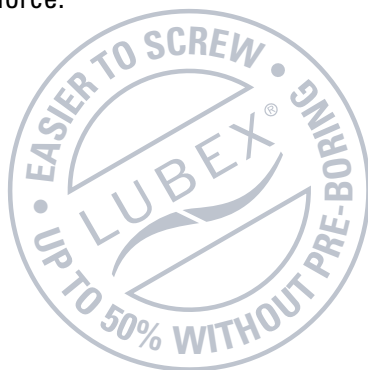
**6) Protective and aesthetic coatings.**  
(see page 9)



**ENTIRE PRODUCTION CYCLE IN ITALY**



- 7) **LUBEX® lubrication treatment**  
to reduce fastening force.  
(see page 8)

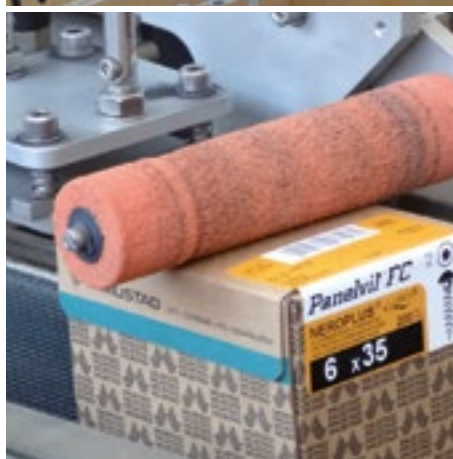


- 8) **Salt spray chamber inspection** to test corrosion resistance.

**Fischerscope® inspection** of coating thickness.



- 9) **Box packaging** with screw description and batch number on label.

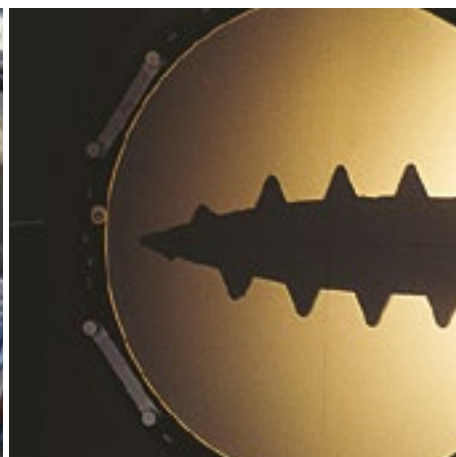


**"Screws in stock = over 99% availability"**

- **5,000** items in stock
- **Dedicated storage areas**
- **Thousands of pallets** ready for delivery.

**ENTIRE PRODUCTION CYCLE IN ITALY**

**In-process and statistical inspections** in each manufacturing step.



**In-house maintenance.**



**Highly specialised in-house tooling.**



**ENTIRE PRODUCTION CYCLE IN ITALY**





## CASE HARDENING TREATMENT

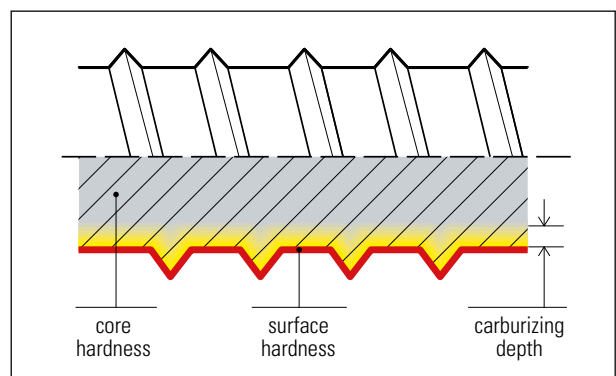
This process confers **hardness and toughness to the screw, necessary to screw or bore in different materials.**

It is a thermo-chemical process, made in controlled atmosphere furnaces, that consists of two phases:



## CARBONITRIDING

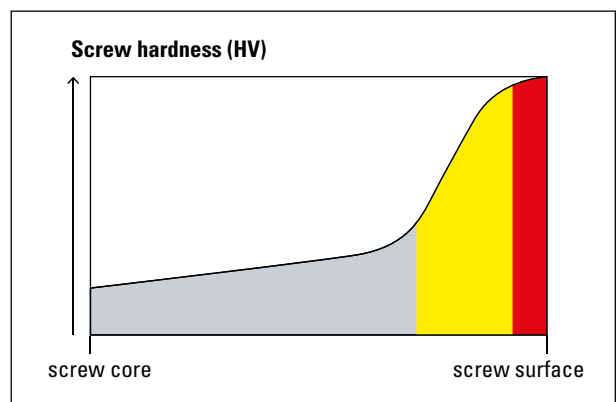
The injection of specific gases in a controlled atmosphere at a high temperature **adds more nitrides and carbides to the screw surface** (surface hardness).



## HARDENING

It is necessary to cool the screw abruptly in order to **increase the metal toughness and resilience and to obtain a very hard surface.**

These characteristics are necessary **to resist to a high screwing torque** and to create the thread in the hardest wood (core hardness).



Variation of the screw hardness (between surface and core) after the case hardening treatment.

**The SPC system** (Statistical Product Control) **controls the carbonitriding process** to guarantee high and constant quality level over time. The batch number printed on labels guarantees the **traceability.**



## LUBEX® LUBRICATION TREATMENT

This treatment's purpose is to reduce the friction between the screw and the material. Consequently, it helps **to reduce the fastening force and the tool wear**.

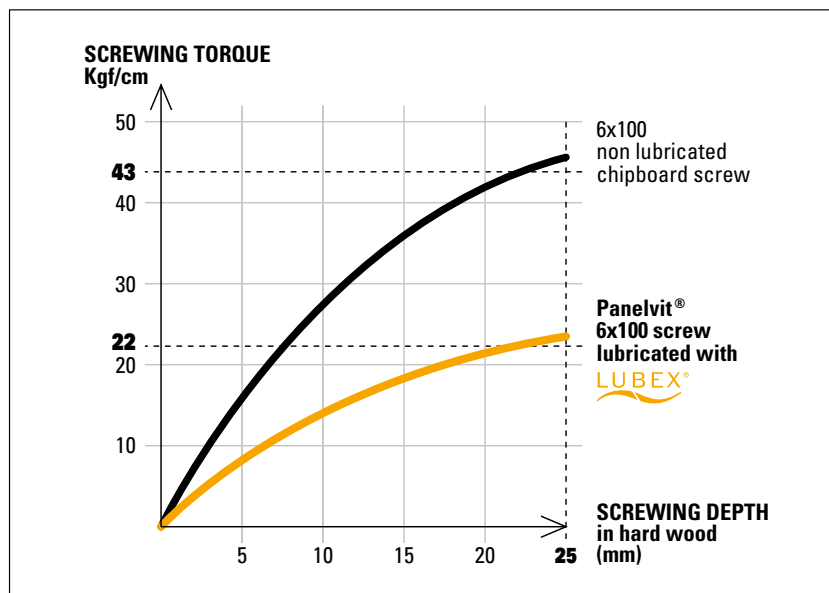
LUBEX® treated screws: Panelvit®, Kovervit® AA for wood and Formex® (LUBEX®-M version).



This treatment has two advantages:

### 1) SCREWING STEP

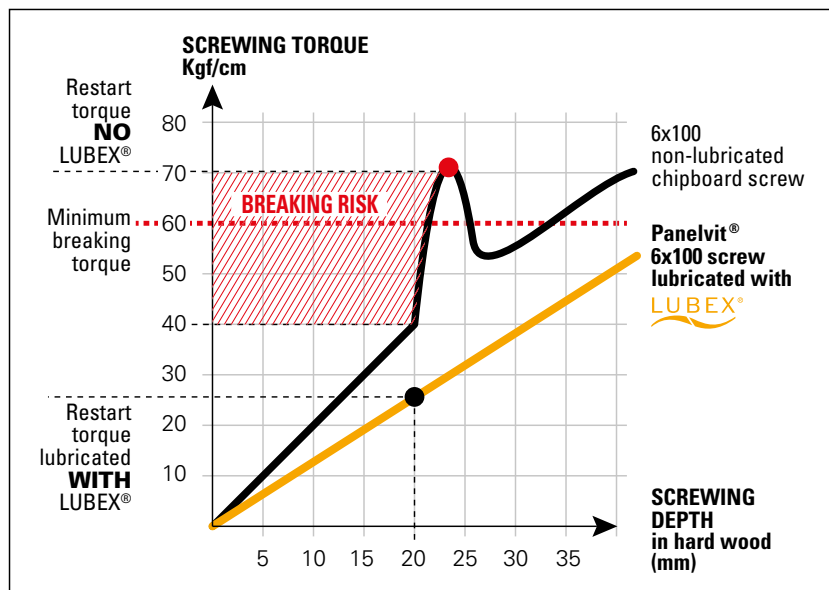
**Reduction of the fastening force up to 50%** more than a non-lubricated screw.



### 2) RESTART OR UNSCREWING

In case of more-steps screwing (stop and restart, or unscrewing), the screw undergoes a high torsion because of the friction with the material. This effort can also overcome the breaking limit.

**LUBEX® preserves the screw from breaking and tools from wearing because it avoids dangerous torque increases.**





## COATINGS

These coatings have both the aim **to protect screws against rust and corrosion** in order to guarantee the reliability over time **and to give the right aesthetic appearance to the screw, depending on the application.**

All Mustad treatments are **environmental-friendly and Chrome VI free**, according to **Rohs and Reach normative and 2000/53 directive** (end-of-life vehicles).



## AESTHETIC COATINGS

These treatments have an aesthetic purpose. **They are used when the coating colour needs to match the hardware.**

### TREATMENT

### APPEARANCE

### APPLICATION

#### BRONZE-PLATING

Copper electrolytic coating with bronzing chemical oxidation and protective oil.



*Dark wood.  
Hardware components for furniture.*

#### BRASS-PLATING

Copper, Nickel and Brass electrolytic coating with passivation and protective lacquer.



*Brass-plated hardware components  
(handles, plates, etc.).*

#### NICKEL-PLATING

Galvanic treatment of Nickel on Copper.



*Nickel-plated hardware components  
(handles, furniture hinges, etc.).*

## HIGH-RESISTANT COATINGS

The main characteristic of these coatings is **to protect screws against rust and corrosion**, in order to guarantee reliability over time.

The parameter used to express the resistance to rust corrosion is the number of hours of permanence in salt spray before red rust appearance. Tests are compliant with standard **UNI EN ISO 9227**.

### TREATMENT

### APPEARANCE

### APPLICATION

#### 100 HOURS WHITE ZINC PLATING

Salt spray corrosion resistance:  
> 100 hrs.

**Grade 3 standard EN 1670.**



*High resistance to corrosion.  
Recommended for **outdoor use, even in case of humid environment** caused by rain or dew.*

#### CHROMITING®

Salt spray corrosion resistance:  
> 240 hrs.

**Grade 4 standard EN 1670.**



*High resistance to corrosion.  
Recommended for **outdoor use, even in case of aggressive atmospheres**.*

#### NEROPLUS®

Black coating, sealed with anti-scratches treatment.

Salt spray corrosion resistance:  
> 1,000 hrs.

**Grade 5 standard EN 1670.**







*Very high resistance to corrosion.  
Recommended for **outdoor use, even in case of aggressive atmospheres** and prolonged exposure to corrosive agents.*

### TREATMENT

### APPEARANCE

### CORROSION RESISTANCE

(numbers of hours of permanence in Salt Spray before red rust appearance, according to norm UNI EN ISO 9227)

		0	72 hrs	100 hrs	240 hrs	1000 hrs
WHITE, YELLOW OR BLACK STANDARD PLATING						
<b>PROTECTIVE COATINGS MUSTAD®</b>						
<b>WHITE ZINC PLATING 100 HOURS</b>						
<b>CHROMITING®</b>						
<b>SILVERPLUS®</b>						
<b>NEROPLUS®</b>						



## A TRADEMARK OF QUALITY AND SAFETY

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- **The MUSTAD logo printed on the head** of all screws guarantees quality, reliability and safety.
- All production lots undergo **SPC (Statistical Product Control) inspections**.
- Lot numbers printed on labels for **total traceability of all production steps**.
- High quality standards maintained constant over time guarantee **screws suitable for automatic or critical assembly**.

## CERTIFICATIONS

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- **Lloyd's certifications** as screws manufacturer:  
ISO 9001: 2015 (n. LRC 10144819),  
IATF 16949: 2016 (n. 0336614) specific for automotive applications.
- **EIFI (n. E1013) European Production Guarantee**.
- **AQP (Product Quality Assurance) certification** conferred by automotive companies authorising MUSTAD to deliver directly to the production line without further acceptance inspections (**Free-Pass**).
- **Direct MUSTAD Quality System Certification by primary companies** in various sectors: automotive, household appliances, mechanical, constructions, door and window fixtures, etc.
- **CE marking** for assembly elements for making load-bearing timber structures, according to EN 14592:2009 (conferred by CSTB Centre Scientifique du Bâtiment, Paris, France).
- **DoP (Declaration of Performance)** according to European Constructions Regulation 305/2011.
- Rigorous respect of **standards** for protecting workers, the environment and customers.

## TRADE ASSOCIATION

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Leading the history of our country for **over one hundred years**.



European product guarantee



2012  
EN 14592 : 2009  
CSTB - PARIS



A CENTURY-OLD ITALIAN COMPANY



FEDERMECCANICA

ASSOCIATO  
Unione Industriale Torino



## COMMERCIAL BOX

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- **Content:** 200 / 500 pieces.
- **Drawer-like opening**, can be closed again after use.  
Possibility of picking content from stacked boxes.
- **All boxes are the same width** for tidier storage.
- **High crushing strength.**

## LABEL

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- **Three different colours** for identifying product families.
- **Visual identification of product features**, with a description of use.
- **Indication of the tool to be used for fastening.**
- **Lot reference number** allowing total traceability of process documentation and testing compliant with ISO 9001 and IATF 16949.
- **CE mark** for all the screws for load-bearing timber assembly elements, according to EN 14592:2009.
- **Item code.**
- **EAN 13 barcode.**

## COMPLETE PACKAGING OF AN ITEM

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- Complete pre-packaging of commercial boxes **proportional to the sales turnover** of the various items.
- **Storage and handling ease.**
- **Clear identification of contents** with label affixed on the outside.



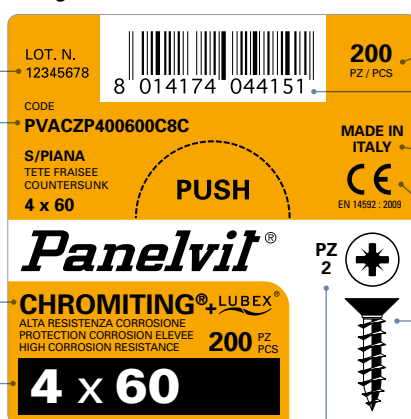
**Orange: Panelvit®, PZ recess**

Lot reference number

Item code

Coating

Screw size



Content

EAN 13 barcode

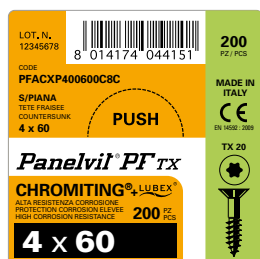
100% Made in Italy

CE marking, according to EN 14592/2009

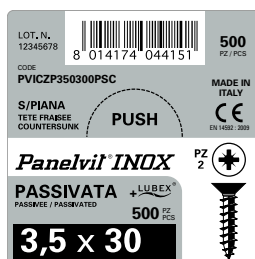
Item picture

Fastening tool

**Orange with green band:**  
**Panelvit®, TX recess**



**Grey:**  
**Panelvit® INOX**



All packaging in recyclable carton





Lubricated universal screw suitable for **screwing without pre-boring** in: chipboard panels, wood, hardware, thin plates, plastic and plugs.

#### **DEEPER RECESS**

to ensure correct coupling with the screwdriver bit.

**A deep recess with a perfect geometry** means that **one bit can be used for thousands of screwing operations.**



#### **REINFORCED HEAD**

to allow **high screwing torque transmission.**

#### **SMOOTH, BITING PROFILE THREAD**

to ensure fast advancement with minimum effort, **reducing the risk of splitting the wood.**

#### **OGIVE-SHAPED POINT**

**(all-threaded)**, guarantees safe gripping without slipping and gradual, constant screw penetration.

The results is **better penetration** ease and lower material cracking risk because there are no discontinuities.



*Panelvit® ogive-shaped screw point*



## CASE HARDENING TREATMENT

This confers two properties to the screw:

- **very hard surface**, for biting into the fibres of the hardest wood;
- **tough, elastic core**, needed to avoid breakage of screws.

## PROTECTIVE TREATMENT

To protect the screw from rust and corrosion, guaranteeing reliability over time and providing appearance suited to all uses.

## LUBEX® LUBRICATION

This is a specific MUSTAD anti-friction treatment which **reduces the fastening force by up to 50%** with respect to a non-lubricated screw.

## IN-PROCESS INSPECTIONS

The entire production process is subjected to **SPC (Statistical Product Control) inspections**, to make sure the **high quality level is maintained constant over time**.

The lot number printed on the labels ensures **total traceability** of all production steps and of the respective inspection/test documents.

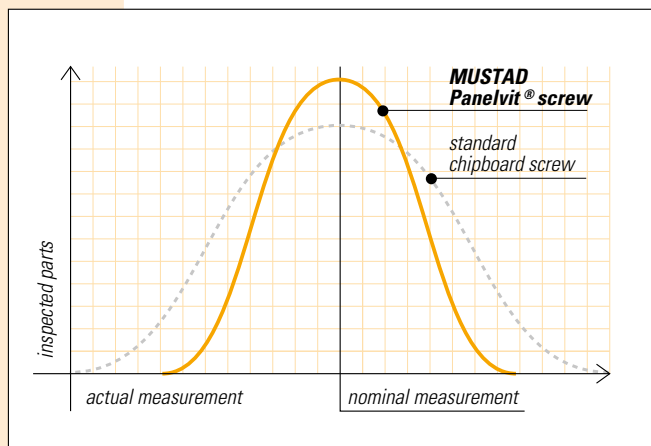
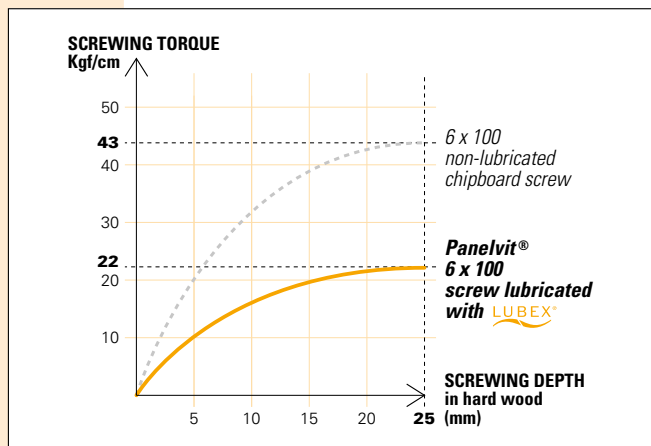
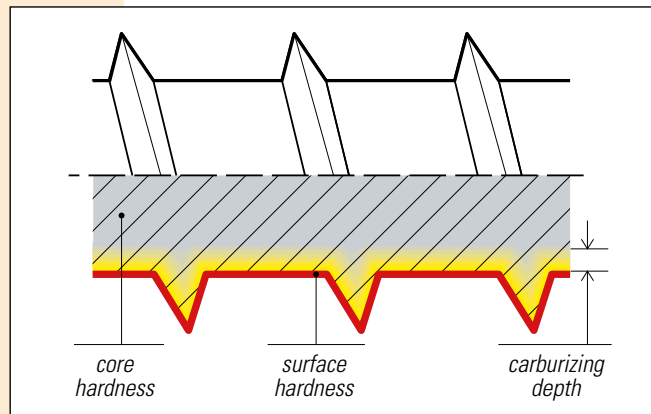
## CALIBRATED SCREWS

Panelvit® Mustad screws are made **respecting tolerances which are stricter than those of standard fasteners**. They can be defined "**calibrated**", i.e. suitable for automatic screwing systems.

## CE MARKING

For load-bearing timber assembly elements, according to EN 14592:2009 (awarded by CSTB Centre Scientifique du Bâtiment, Paris). Issue of DoP (Declaration of Performance), according to European Construction Products Regulation 305/2011.

- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



2012  
EN 14592 : 2009  
CSTB - PARIS

Countersunk Head  
**CSK**

Recess  
**PZ**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	2.5	3	3.5	4	4.5	5	6
PZ Recess	Z 1	Z 1	Z 2	Z 2	Z 2	Z 2	Z 3
Length/Thread [mm]							
<b>10</b>	•	•					
<b>12</b>	•	•	•	•			
<b>16</b>	•	•	•	•	•		
<b>18</b>	•	•	•	•			
<b>20</b>	•	•	•	•	•	•	
<b>25</b>	•	•	•	•	•	•	
<b>30</b>	•	•	•	•	•	•	•
<b>35</b>		•	•	•	•	•	
<b>40</b>		•	•	•	•	•	•
<b>45</b>		•	•	•	•	•	
<b>50</b>			•	•	•	•	•
<b>55</b>			•	•	•		
<b>60</b>				•	•	•	•
<b>70</b>				•	•	•	•
<b>80/70</b>				•	•	•	•
<b>90/70</b>				•	•	•	•
<b>100/70</b>						•	•
<b>110/70</b>						•	•
<b>120/70</b>						•	•
<b>130/70</b>							•
<b>140/70</b>							•
<b>160/70</b>							•
<b>180/70</b>							•
<b>200/70</b>							•
Boxes	500 pieces	200 pieces				100 pieces	



Items code: PVACZP Diameter x Length C8C

Countersunk Head  
**CSK**

Recess  
**PZ**



## BRONZED LUBRICATED LUBEX®

(bronze plating description: page 9)

Diameters [mm]	2.5	3	3.5	4	4.5	5	6
PZ Recess	Z 1	Z 1	Z 2	Z 2	Z 2	Z 2	Z 3
Length/Thread [mm]							
<b>10</b>	•	•					
<b>12</b>	•	•	•				
<b>16</b>	•	•	•	•			
<b>18</b>	•	•	•	•			
<b>20</b>	•	•	•	•	•	•	
<b>25</b>	•	•	•	•	•	•	
<b>30</b>	•	•	•	•	•	•	•
<b>35</b>		•	•	•	•	•	
<b>40</b>		•	•	•	•	•	•
<b>45</b>		•	•	•	•	•	
<b>50</b>			•	•	•	•	•
<b>60</b>				•	•	•	•
<b>70</b>				•	•	•	•
<b>80/70</b>				•	•	•	•
<b>90/70</b>				•	•	•	•
<b>100/70</b>						•	•
<b>110/70</b>						•	•
<b>120/70</b>						•	•
<b>130/70</b>							•
<b>140/70</b>							•
<b>150/70</b>							•
<b>160/70</b>							•
<b>180/70</b>							•
<b>200/70</b>							•
Boxes	500 pieces	200 pieces				100 pieces	



EN 14592 : 2009

Items code: PVACZP Diameter x Length BZC



**Assorted MUSTAD CASE available**  
For details see page 66

Countersunk Head  
**CSK**

Recess  
**PZ**



## BRASS-PLATED

(brass-plating description: page 9)

Diameters [mm]	2.5	3	3.5	4	4.5	5
PZ Recess	Z 1	Z 1	Z 2	Z 2	Z 2	Z 2
Length/Thread [mm]						
12	•					
16	•	•	•	•		
20	•	•	•	•		
25		•	•	•		
30		•	•	•	•	•
35		•	•	•	•	
40		•	•	•	•	•
50			•	•	•	•
60				•	•	•
70					•	•
80/70						•
Boxes	500 pieces			200 pieces		

Items code: PVACZP Diameter x Length OTC

Countersunk Raised Head  
**CSKR**

Recess  
**PZ**



## BRASS-PLATED

(brass-plating description: page 9)

Diameters [mm]	3.5	4.5	
PZ Recess	Z 2	Z 2	
Mustad Type	259A		
Length [mm]			Boxes
20	● ■		500 pieces
25	● ■		
30	● ■	●	
35		●	
45		●	200 pieces
50		●	
60		●	

Items code: diameter 3.5 mm: FR (Mustad Type) Diameter x Length OTC  
diameter 4.5 mm: PVACZS Diameter x Length OTC

■ version with bracking ribs under the head



Countersunk Head  
**CSK**

Recess  
**PZ**



## NEROPLUS® LUBRICATED

(Neroplus® description: page 10)

Diameters [mm]	3	3.5	4	4.5
PZ Recess	Z 1	Z 2	Z 2	Z 2
Length [mm]				
16	•	•		
20	•	•	•	
25		•	•	
30		•	•	
35			•	•
40			•	•
50				•
Boxes	500 pieces			200 pieces



Items code: PVACZP Diameter x Length KNC

**PF**  
Partial Thread  
PZ Recess

# Panelvit® PF

PARTIAL THREAD PZ RECESS

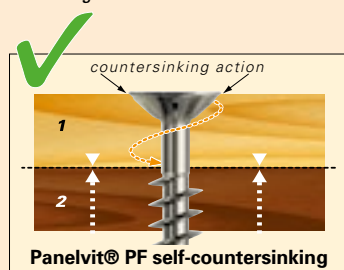


Screw recommended for **fixing thick parts** without pre-boring.

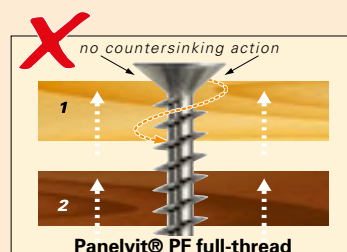
**Self-countersinking ribs under the head** perform a **milling action during tightening**, and create a housing for the screw for a perfectly flushed alignment with the surface of the material.

**The smooth portion of the shank** (40% of the screw length) provides a **pulling effect** on the two parts to obtain correct alignment.

Fastening differences between a full-thread Panelvit® and a Panelvit® PF.



The smooth shank can turn free in the above part (1). The thread pulls the underneath part (2) against the above.



The thread works in the same way on both parts. The underneath part (2) can not pull against the above part (1).

**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® PF

## PARTIAL THREAD PZ RECESS



Countersunk Head  
**CSK**

Recess  
**PZ**



**CHROMITING® LUBRICATED LUBEX®**

(Chromiting® description: page 10)

Diameters [mm]	3.5	4	4.5	5	6
PZ Recess	Z 2	Z 2	Z 2	Z 2	Z 3
Length/Thread [mm]					
<b>30/18</b>	•	•			
<b>35/20</b>	•	•			
<b>40/25</b>	•	•	•		
<b>45/28</b>	•	•	•		
<b>50/30</b>	•	•	•	•	
<b>60/34</b>		•	•	•	•
<b>70/43</b>		•	•	•	•
<b>80/47</b>			•	•	•
Boxes	500 pieces		200 pieces		



EN 14592 : 2009

PANELVIT® PF longer than 80 mm are only available without self-countersinking ribs under the head (see page 17)

Items code: PFACZP Diameter x Length C8C

Countersunk Head  
**CSK**

Recess  
**PZ**



**BRONZED LUBRICATED LUBEX®**

(bronze plating description: page 9)

Diameters [mm]	3.5	4	4.5	5	6
PZ Recess	Z 2	Z 2	Z 2	Z 2	Z 3
Length/Thread [mm]					
<b>30/18</b>	•	•			
<b>35/20</b>	•	•	•		
<b>40/25</b>	•	•	•	•	
<b>45/28</b>	•	•	•	•	
<b>50/30</b>	•	•	•	•	
<b>60/34</b>		•	•	•	•
<b>70/43</b>		•	•	•	•
<b>80/47</b>			•	•	•
Boxes	500 pieces		200 pieces		



EN 14592 : 2009

PANELVIT® PF longer than 80 mm are only available without self-countersinking ribs under the head (see page 18)

Items code: PFACZP Diameter x Length BZC

**TX**  
Full Thread TX Recess

**Panelvit® TX**  
UNIVERSAL SCREW TX RECESS



Lubricated **universal** screw suitable for **screwing without pre-boring** in: chipboard panels, wood hardware, thin plates, plastic and plugs.

The screwing force is entirely transferred by the **very deep, vertical wall TX head**. This **avoids stripping** of the bit and wear of the recess.



**Only three recesses** to screw all the range:

Diameter: 3	<b>TX 10 Recess</b>
Diameter: 3.5 - 4 - 4.5 - 5	<b>TX 20 Recess</b>
Diameter: 6	<b>TX 30 Recess</b>

**CHROMITING® PROTECTIVE TREATMENT**

This iridescent white treatment guarantees **a much better rust protection than normal galvanisation treatments**.

**LUBRICATION LUBEX®**

MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® TX

UNIVERSAL SCREW TX RECESS

Countersunk Head  
**CSK**

Recess  
**TX**



**CHROMITING® LUBRICATED LUBEX®**

(Chromiting® description: page 10)

Diameters [mm]	3	3.5	4	4.5	5	6
TX Recess	TX10	TX20	TX20	TX20	TX20	TX30
Length/Thread [mm]						
<b>16</b>	•	•	•			
<b>18</b>		•	•			
<b>20</b>	•	•	•			
<b>25</b>	•	•	•			
<b>30</b>		•	•	•	•	
<b>35</b>		•	•	•	•	
<b>40</b>		•	•	•	•	•
<b>50</b>		•	•	•	•	•
<b>60</b>			•	•	•	•
<b>70</b>			•	•	•	•
Boxes	500 pieces		200 pieces			



EN 14592 : 2009

Items code: PVACXP Diameter x Length C8C

## PF TX

Partial Thread  
TX Recess



## Panelvit® PF TX

PARTIAL THREAD TX RECESS

Screw recommended for **fastening hard or thick wood**. Applications in carpentry and constructions and for building timber structures.

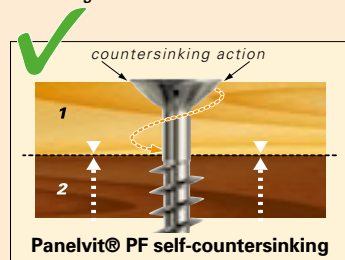
**Only three recesses** to screw all the range:

Diameter: 3	<b>TX 10 Recess</b>
Diameter: 3.5 - 4 - 4.5 - 5	<b>TX 20 Recess</b>
Diameter: 6	<b>TX 30 Recess</b>

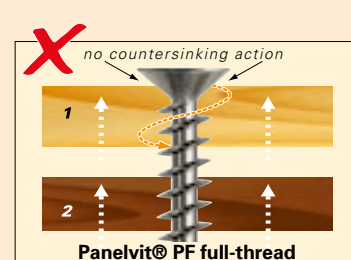
**Self-countersinking ribs under the head** perform a **milling action during tightening**, and create a housing for the screw for a perfectly flushed alignment with the surface of the material.

**The smooth portion of the shank** (40% of the screw length) provides a **pulling effect** on the two parts to obtain correct alignment.

Fastening differences between a full-thread Panelvit® and a Panelvit® PF.



The smooth shank can turn free in the above part (1). The thread pulls the underneath part (2) against the above.



The thread works in the same way on both the parts. The underneath part (2) can not pull against the above part (1).

### CHROMITING® PROTECTIVE TREATMENT

This iridescent white treatment guarantees a **much better rust protection than normal galvanisation treatments**.

### LUBRICATION LUBEX®

MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® PF TX

## PARTIAL THREAD TX RECESS



Countersunk Head  
**CSK**

Recess  
**TX**



**CHROMITING® LUBRICATED LUBEX®**

(Chromiting® description: page 10)

Diameters [mm]	3	3.5	4	4.5	5	6
TX Recess	TX10	TX20	TX20	TX20	TX20	TX30
Length/Thread [mm]						
<b>30/18</b>	•	•	•			
<b>35/20</b>	•	•	•			
<b>40/25</b>	•	•	•	•	•	
<b>45/28</b>		•	•	•	•	
<b>50/30</b>		•	•	•	•	•
<b>60/34</b>			•	•	•	•
<b>70/43</b>			•	•	•	•
<b>80/47</b>			•	•	•	•
<b>90/70</b>					•	•
<b>100/70</b>					•	•
<b>120/70</b>					•	•
<b>130/70</b>						•
<b>140/70</b>						•
<b>150/70</b>						•
<b>160/70</b>						•
<b>180/70</b>						•
<b>200/70</b>						•
Boxes	500 pieces		200 pieces		100 pieces	



Items code: PFACXP Diameter x Length C8C



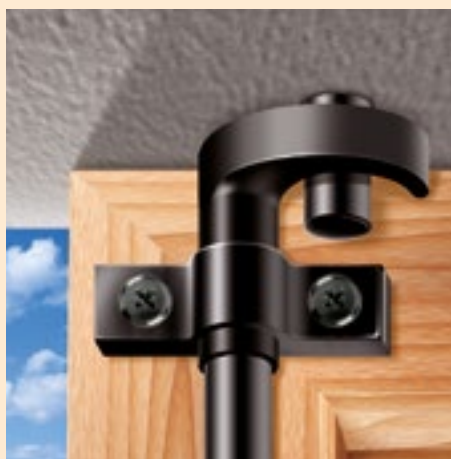
**Assorted MUSTAD BOX available**  
For details see page 65

## PAN HEAD

**Panelvit**<sup>®</sup>  
UNIVERSAL SCREW



The **head geometry** develops a **high clamping pressure** making these screws perfect for fastening door and window fixture hardware like shutter hinges and furniture hardware.



**LUBRICATION LUBEX<sup>®</sup>**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*





**PAN HEAD**

Recess  
**PZ**



## NEROPLUS® LUBRICATED

(NeroPlus® description: page 10)

Diameters [mm]	3.5	4	4.5	5
PZ Recess	Z 2	Z 2	Z 2	Z 2
Length [mm]				
16	•			
20	•	•		•
25	•	•		•
30	•	•	•	•
35			•	•
40			•	•
50				•
Boxes	500 pieces			200 pieces



EN 14592 : 2009

Items code: PVACZC Diameter x Length KNC



**PAN HEAD**

Recess  
**PZ**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	3	3.5	4	5
PZ Recess	Z 1	Z 2	Z 2	Z 2
Length [mm]				
12		•	•	
16	•	•	•	
20		•	•	•
25		•	•	•
30			•	•
35			•	
40			•	•
50				•
Boxes	500 pieces			200 pieces



EN 14592 : 2009

Items code: PVACZC Diameter x Length C8C

**FFL**  
Flanged Head

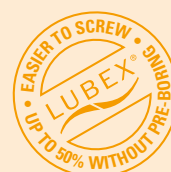
**Panelvit® FFL**  
FLANGED HEAD



With a wide head geometry, these screws can develop a **high clamping pressure** making them ideal for fixing pipe collars, brackets and supports.



**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*

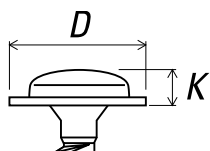


# Panelvit® FFL

## FLANGED HEAD

Head sizes

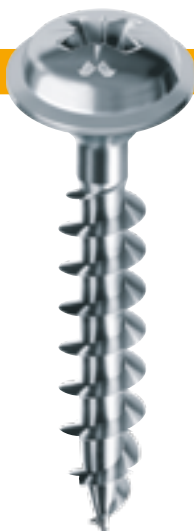
(sizes in mm)



Screw diameter	4.5	5
Head diameter D max.	10	12
Head height K max.	3,00	3.50

Flanged Head  
**FFL**

Recess  
**PZ**



**WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®**  
(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	<b>4.5</b>	<b>5</b>
PZ Recess	Z 2	Z 2
Mustad Type	050A	113A
Length [mm]		
<b>40</b>	•	
<b>50</b>		•
Items code: PV (Mustad Type) Diameter x Length B8C		

Boxes
500 pieces
200 pieces



EN 14592 : 2009

**CSK**  
Countersunk Head



**Panelvit® INOX**  
STAINLESS STEEL A2

Specific screw for **outdoor use in humid or marine environments or in presence of industrial and aggressive atmospheres.**

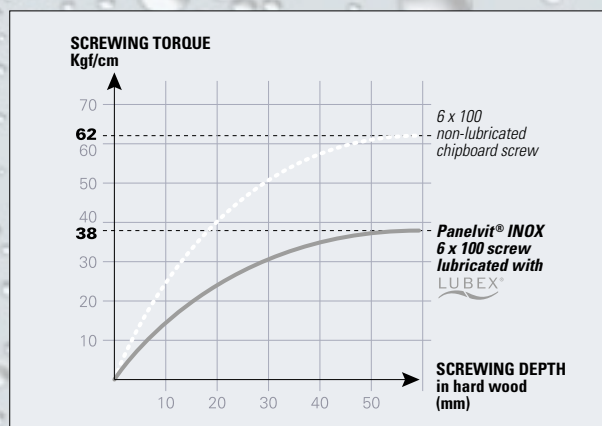
Panelvit® INOX is made of austenitic stainless steel A2 to guarantee **excellent corrosion and rust prevention.**

Although not being thermally treated, PANELVIT® INOX can be inserted **without pre-boring** also in hard wood and it allows safe, fast fastening.

These effects are achieved as a result of:

- work **hardened material** which avoid breakage of the screw and stripping of the recess;
- MUSTAD **LUBEX®** lubrication, which reduces the screwing force by 50% (see chart);
- **deep, smooth, sharp thread;**
- **multiple radius tip (ogive-shaped).**

Screwing force of a Panelvit® lubricated with **LUBEX®** with respect to a non-lubricated screw.



The **passivation** treatment confers a brilliant, shiny and long-lasting finish.

⚠ *Dimensional specifications, page 69.*



# Panelvit<sup>®</sup> INOX

STAINLESS STEEL A2



Countersunk Head  
**CSK**

Recess  
**PZ**



**PASSIVATED LUBRICATED LUBEX<sup>®</sup>**

Diameters [mm]	3	3.5	4	4.5	5	6
PZ Recess	Z 1	Z 2	Z 2	Z 2	Z 2	Z 3
Length/Thread [mm]						
16	•	•	•			
20	•	•	•			
25	•	•	•			
30	•	•	•	•	•	
35		•	•	•	•	
40		•	•	•	•	
50			•	•	•	•
60/50			•	•	•	•
70/50				•	•	•
80/50					•	•
100/50						•
Boxes:	200 pieces		100 pieces			
Items code: PVICZP Diameter x Length PSC						



Countersunk Head  
**CSK**

Recess  
**TX**



**PASSIVATED LUBRICATED LUBEX<sup>®</sup>**

Diameters [mm]	<b>5</b>	
TX Recess	TX 20	
Mustad Type	340I	
Length/Thread [mm]		Boxes
<b>50/30</b>	•	
<b>60/34</b>	•	
<b>70/43</b>	•	
Items code: PF340I Diameter x Length PSC		200 pieces





The image is a close-up photograph of a wooden window or door frame. A dark metal hinge or bracket is visible, secured with screws. The wood has a light, natural finish. The text 'Panelvit' is written in a large, white, italicized serif font, with a registered trademark symbol (®) to its upper right. Below it, the words 'FOR WOOD FRAMES' are written in a smaller, white, italicized sans-serif font.

# *Panelvit*®

*FOR WOOD FRAMES*

## TD CUT

Reduced Head  
Anti-Split Tip

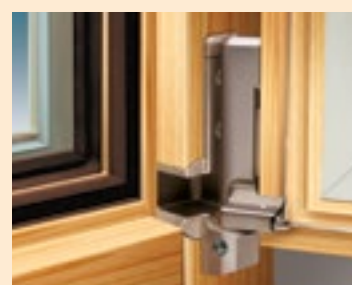
# Panelvit® TD CUT

FOR FIXING WINDOWS HARDWARE

Partially threaded screw with **reduced head and anti-split CUT tip** recommended for fastening tilt and turn hardware systems made by the most common European manufacturers.

**The head (Ø 7 mm)** adapts perfectly to the **countersinking** present on the hardware elements to be fixed.

**The smooth part of the shank** does not interfere with the **system movement** even in case of inclined screwing.



**The thread (Ø 4 mm)** guarantees a **pull-out strength much higher** than that of common Ø 3.5 mm screws.

**The anti-split CUT tip** is ideal for fastening near the frame edges (angular movements, scissor supports, hinges), where traditional screws could cause splitting and compromise the fastening and satisfactory operation of the system.

### CHROMITING® PROTECTIVE TREATMENT

This iridescent white treatment guarantees a **much better rust protection** than normal galvanisation treatments.

### LUBRICATION LUBEX®

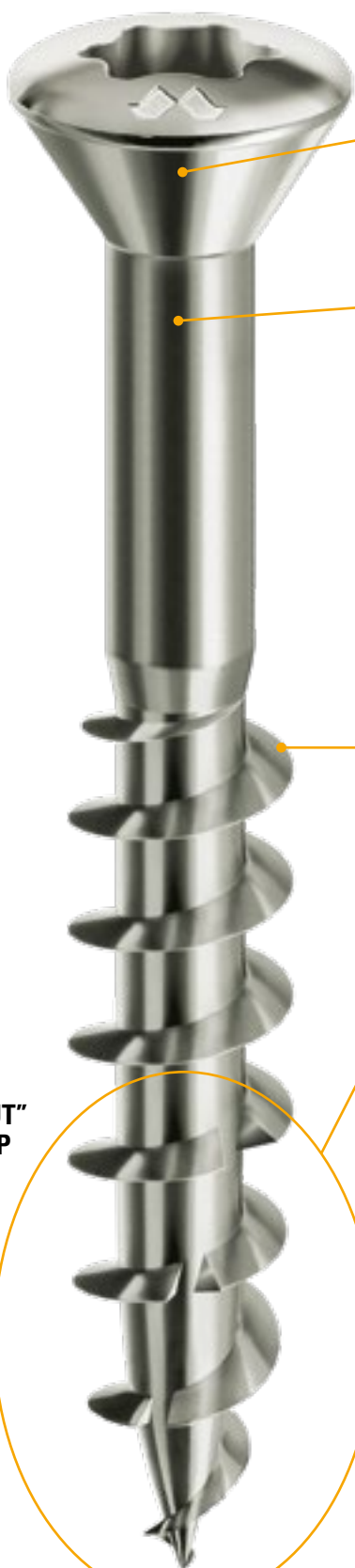
MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



⚠ *Dimensional specifications, page 69.*

⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*

"CUT"  
TIP



# Panelvit® TD cut

FOR FIXING WINDOWS HARDWARE



Countersunk Raised Head  
**CSKR**

Recess  
**TX**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	<b>4</b>
TX Recess	TX 20
Mustad Type	507A
Length/Thread [mm]	
<b>35/20</b>	•
<b>40/25</b>	•
Items code: P1507A Diameter x Length C8C	

Boxes  
1,000 pieces

"CUT"  
TIP



Countersunk Head  
**CSK**

Recess  
**PZ**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	<b>4</b>
PZ Recess	Z 2
Mustad Type	382A
Length/Thread [mm]	
<b>30/20</b>	•
<b>35/20</b>	•
Items code: P1382A Diameter x Length C8C	

Boxes  
1,000 pieces

"CUT"  
TIP

# CUT

Anti-Split Tip

# Panelvit® CUT

FOR FIXING INVISIBLE HINGES



Screw with **anti-split CUT tip** specific for **fixing invisible interior door hinges**.

**The screw head** is housed in the hinge countersinking so as not to hinder cover plate insertion.

**The anti-split CUT tip** penetrates into the wood (natural, agglomerate, MDF) of the doors or the frame **without splitting the material or the surface laminate**.



**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



## WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®

(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	4	5	
PZ Recess	Z 2	Z 2	
Mustad Type	311A	417A	
Length [mm]			Boxes
<b>25</b>	•		500 pieces
<b>30</b>		•	

Items code: PV (Mustad Type) Diameter x Length B8C

The **reduced head** adapts to the **countersinking on the door locks**.

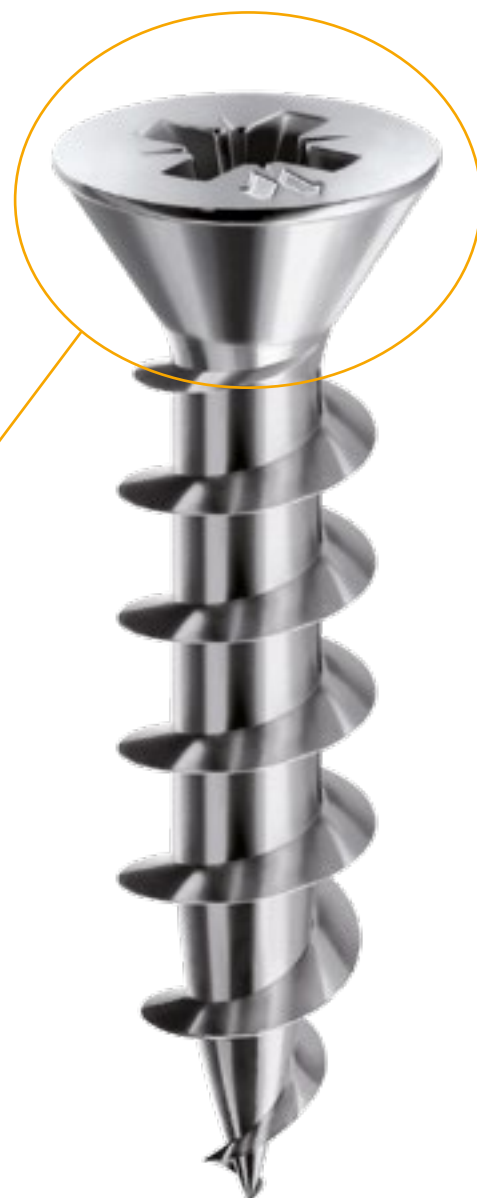


The **reduced head** allows to use a 3.5 mm diameter screw that **guarantees a better tightness**, avoiding the coming out of the head from the hardware.

### NICKEL-PLATED TREATMENT

for a better matching with the hardware to be fixed.

- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



### NICKEL-PLATED

(nickel-plating description: page 9)

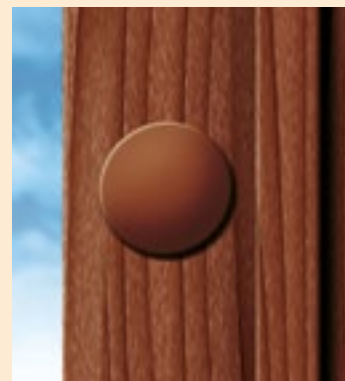
Diameters [mm]	<b>3.5</b>	
PZ Recess	Z 2	
Mustad Type	120A	
Length [mm]		Boxes
<b>20</b>	•	500 pieces

Item code: PV120A Diameter x Length NIC

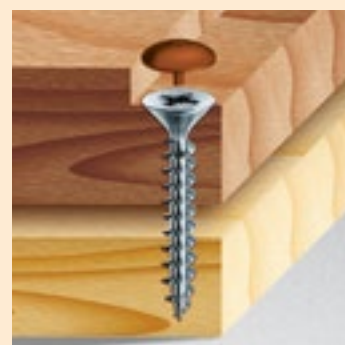
**PC**  
For Plastic Caps



**Screw with a special recess designed to accommodate a decorative plastic cap.** Various colours are available. It is particularly suited for windows, doors and furniture and in all cases in which it is desirable to cover the screw head for aesthetic purposes.



**Plastic caps provided with "ribbed" shank ensure high pull-out strength.** No glue needed for installation.



**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® PC

FOR PLASTIC CAPS

Countersunk Head  
**CSK**

Recess  
**PZ**



**WHITE ZINC PLATED 100 HOURS** LUBRICATED LUBEX®

(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	4.5	5
PZ Recess	Z 2	Z 2
Length/Thread [mm]		
30	•	
35	•	
40	•	
50	•	
60	•	•
70	•	
Boxes	500 pieces	200 pieces
Items code: PCACPP Diameter x Length B8C		



## PLASTIC CAPS FOR PANELVIT® PC SCREWS

diameter 12 mm



WHITE

RAL Code  
9003



BLACK

RAL Code  
9005



BEIGE

RAL Code  
1001



LIGHT  
BROWN

RAL Code  
8003



DARK  
BROWN

RAL Code  
8017

500 pieces Boxes

Item code: CPPC RAL Code 01200CC



**Important: the plastic caps must be used in combination with Panelvit® PC screws.**

# FC

Large Head with Collar

# Panelvit® FC

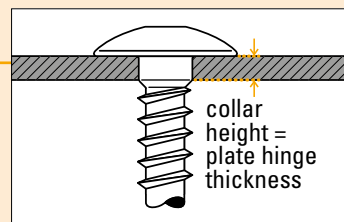
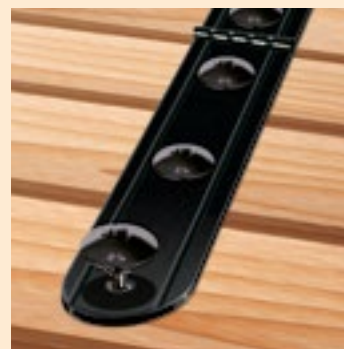
LARGE HEAD WITH COLLAR



Particularly suited for **fixing hinges and shutter plate hinges for window fixtures and window shutters made of wood, aluminium and PVC.**

**The large head** provides a **strong clamping pressure** and better hole coverage than common pan head screws.

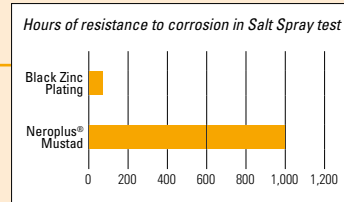
**The collar**, as thick as the plate hinge, centres the hole and provides axial hold to prevent the window shutter from inclining.



## NEROPLUS® RUSTPROOF TREATMENT

This treatment confers a **rust corrosion resistance in the Salt Spray test that is 15 times higher** than traditional black plating.

The scratchproof sealing provides **excellent resistance and improves aesthetic appearance.**



## LUBRICATION LUBEX®

MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® FC

## LARGE HEAD WITH COLLAR



Large Head with Collar  
**FC**

Recess  
**TX**



### NEROPLUS® LUBRICATED

(NeroPlus® description: page 10)

Diameters [mm]	5.5	6	7
TX Recess	TX 30	TX 30	TX 30
Mustad Type	208A	029A / 312A	057A
Length/Thread [mm]			
<b>20</b>		•	
<b>25</b>		•	
<b>30</b>	•	•	•
<b>35</b>	•	•	
<b>40</b>		•	•
<b>45</b>		•	
<b>50</b>		•	•
<b>60/Thr.</b>		•	•
<b>70/Thr.</b>		•	•
<b>80/Thr.</b>		•	

Boxes

200 pieces

100 pieces

Thr.: Maximum thread length: Diameter 6: 70mm  
Diameter 7: 50mm

Items code: Diameter 6: PV029A Diameter x Length KNC (up to length 50 mm)  
PV312A Diameter x Length KNC (from length 60 mm)  
Other Diameters: PV (Mustad Type) Diameter x Length KNC



EN 14592 : 2009



Large Head with Collar  
**FC**

Recess  
**TX**



### NEROPLUS® LUBRICATED

(NeroPlus® description: page 10)

Diameters [mm]	5
PZ Recess	Z 2
Mustad Type	947B
Length [mm]	
<b>20</b>	•
<b>25</b>	•
<b>30</b>	•
<b>35</b>	•
<b>40</b>	•

Boxes

500 pieces

200 pieces

Items code: PV947B Diameter x Length KNC



EN 14592 : 2009



# *Panelvit*®

FOR FURNITURE





Lubricated universal screw suitable for **screwing without pre-boring** in: chipboard panels, wood, hardware, thin plates, plastic and plugs.

#### DEEPER RECESS

to ensure correct coupling with the screwdriver bit.

**A deep recess with a perfect geometry** means that **one bit can be used for thousands of screwing operations.**

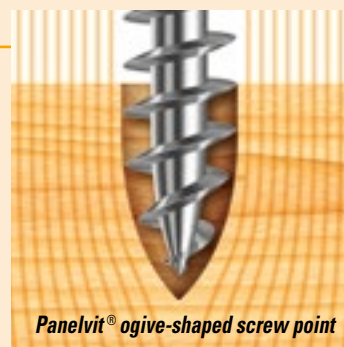


#### SMOOTH, BITING PROFILE THREAD

to ensure fast advancement with minimum effort, **reducing the risk of splitting the wood.**

#### OGIVE-SHAPED POINT

**(all-threaded)**, guarantees safe gripping without slipping and gradual, constant screw penetration. The results is **better penetration** ease and lower material cracking risk because there are no discontinuities.



Panelvit® ogive-shaped screw point

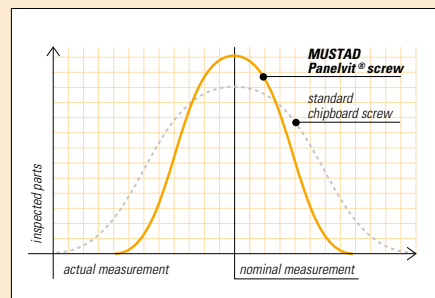
#### LUBRICATION **LUBEX®**

MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



#### SUITABLE FOR AUTOMATIC SCREWING SYSTEMS:

- 1 - **Stricter tolerances than those of standard fasteners.**
- 2 - Reduced risk of mixing and presence of foreign bodies.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*

## THE BULK BOX

### BOX FEATURES

- **Content:** 6.000/20.000 pieces depending on items.
- **Side opening:** no cutting tools needed.
- **Weight:** lower than 10kg.
- **High resistance** to crushing.

### LABEL

- **Visual identification** of the content's characteristics.
- **Indication of the bit to use.**
- **Item code.**
- **Barcode.**
- **Batch number**  
to guarantee the process traceability  
according to standard ISO 9001 and IATF 16949.



Countersunk Head  
**CSK**

Recess  
**PZ**



## WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®

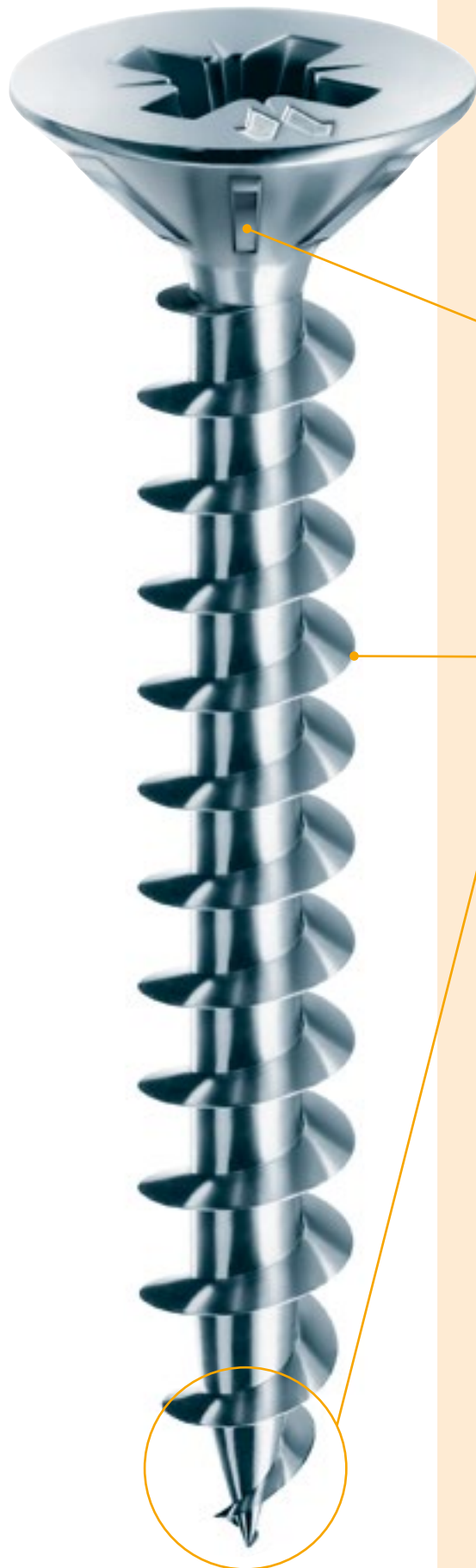
(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	2.5	3	3.5	4
PZ Recess	Z 1	Z 1	Z 2	Z 2
Length/Thread [mm]				
10		•		
12			•	•
14				•
15			•	
16	•	•	•	•
18			•	•
20	•		•	•
25			•	•

Items code: PVACZP Diameter x Length B8S

**FR**  
Braking Effect

**Panelvit® FR**  
BRAKING EFFECT



Specific screw for **fastening furniture hardware on low-density materials**, such as chipboard, MDF and soft wood, **avoiding stripping when tightening**.



**Sharp angle bracking ribs under the head** cause:  
- **stopping by friction when tightening to avoid stripping the material.**  
- **better twist-off and pull-out resistance** even in applications subject to major mechanical stress.



**The sharp thread and narrow pitch** ensure **strong pull-out strength to the screw** also when screwed into typically thin furniture panels.

**The ogive-shaped tip, threaded to the end**, gradually penetrates into the material deforming it **without causing splitting** and avoiding damage to the laminated finishing surface.

**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



Countersunk Head  
**CSK**

Recess  
**PZ**



## WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®

(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	3.5	4
PZ Recess	Z 2	Z 2
Mustad Type	257A	258A
Length [mm]		
<b>16</b>	•	•
<b>18</b>	•	•

Boxes

1,000 pieces

Items code: FR (Mustad Type) Diameter x Length B8C (commercial box)  
FR (Mustad Type) Diameter x Length B8S (bulk box)

Countersunk Raised Head  
**CSKR**

Recess  
**PZ**



## WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®

(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	3.5
PZ Recess	Z 2
Mustad Type	259A
Length [mm]	
<b>16</b>	•
<b>18</b>	•

Items code: FR (Mustad Type) Diameter x Length B8S

Countersunk Raised Head  
**CSKR**

Recess  
**PZ**



## NICKEL-PLATED

(nickel-plated description: page 9)

Diameters [mm]	3.5	4
PZ Recess	Z 2	Z 2
Mustad Type	259A	264A
Length [mm]		
<b>16</b>	•	•
<b>18</b>	•	•

Boxes

500 pieces

Items code: FR (Mustad Type) Diameter x Length NIC

# AF

Anti-Splitting Tip

# Panelvit® AF

ANTI-SPLITTING TIP



AF TIP

Specific screw for **use without pre-boring on:**

- MDF panels
- thin laminate panels and chipboards
- thin wood or plywood
- matchboards and angular elements
- edges and corners (also original)

**without splitting or creating bulges in the material.**

**Reduced head with self-countersinking ribs.**

It penetrates easily into the material. The self-countersinking ribs and reduced countersinking angle **prevent an undesired "wedge effect"** while tightening.

**Partial threading.**

For optimal, fast tightening also for joining very thick panels.

**AF (Anti-Splitting) Self-Drilling Tip.**

It perforates wood like a drill bit by venting the wood chips. The hole accommodates the threading and the screw **penetrates without splitting.**

**LUBRICATION LUBEX®**

MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



⚠ *Dimensional specifications, page 69.*

⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*

*Example of screwing close to the edge:*



*Screwing of Panelvit® AF without pre-boring.*



*Screwing with traditional chipboard screw without pre-boring.*



# Panelvit® AF

ANTI-SPLITTING TIP



Countersunk Head  
**CSK**

Recess  
**PZ**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	<b>4</b>
PZ Recess	Z 2
Mustad Type	140A
Length/Thread [mm]	
<b>35/20</b>	•
<b>40/25</b>	•
<b>50/30</b>	•
<b>60/35</b>	•

Boxes

500 pieces

200 pieces



EN 14592 : 2009

AF TIP

Items code: AF140A Diameter x Length C8C



Countersunk Raised Head  
**CSKR**

Recess  
**TX**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	<b>4</b>
TX Recess	TX 15
Mustad Type	224A
Length/Thread [mm]	
<b>35/20</b>	•

Boxes

500 pieces

AF TIP

Items code: AF224A Diameter x Length C8C

# TPL

Large Flat Head

# Panelvit® TPL

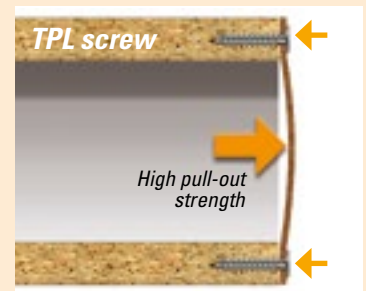
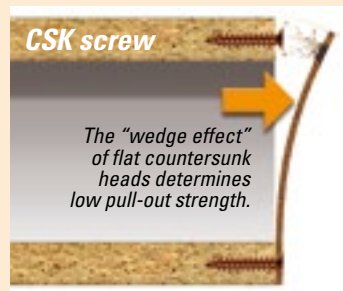
LARGE FLAT HEAD FOR FURNITURE BACK PANELS



The head geometry develops a high clamping pressure making this screw particular **suitable for fastening furniture back panels** usually made of very soft material (thin plywood or cardboard).



The flat surface under the head does not generate the undesired "wedge effect" caused by flat countersunk head screws. The wide area under the head also provides **high back panel pull-out strength**.



The ogive-shaped tip, threaded to the end, gradually penetrates into the material deforming it **without causing splitting** and avoiding damage to the laminated finishing surface.

**LUBRICATION LUBEX®**

MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*

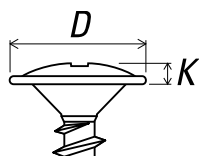


# Panelvit® TPL

LARGE FLAT HEAD FOR FURNITURE BACK PANELS

Head sizes

(sizes in mm)



Screw diameter	3.5	4
Head diameter D max.	8,30	9,40
Head height K max.	1,60	1,90

Large Flat Head  
**TPL**

Recess  
**PZ**



**WHITE ZINC PLATED 100 HOURS LUBRICATED LUBEX®**

(MUSTAD "100 HOURS" white zinc plating description: page 10)

Diameters [mm]	<b>3.5</b>	<b>4</b>
PZ Recess	Z 2	Z 2
Mustad Type	415A	416A
Length [mm]		
<b>20</b>	•	•
<b>25</b>	•	

Items code: PV (Mustad Type) Diameter x Length B8C

Boxes

500 pieces

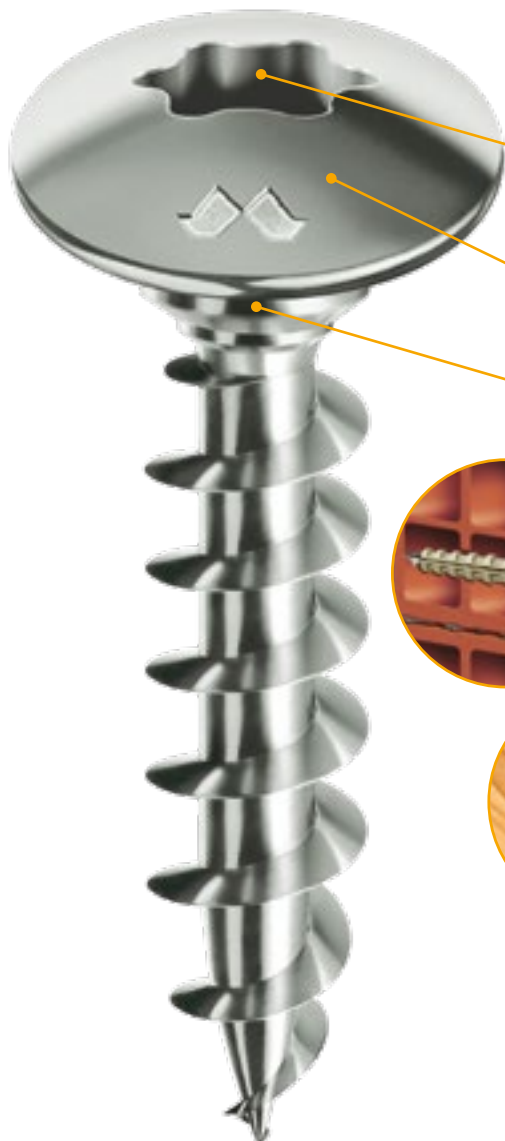


***Panelvit<sup>®</sup> and KOVERVIT<sup>®</sup>***  
***FOR WOOD CONSTRUCTIONS***



**FC**  
Large Head with Collar

**Panelvit® FC**  
LARGE HEAD WITH COLLAR



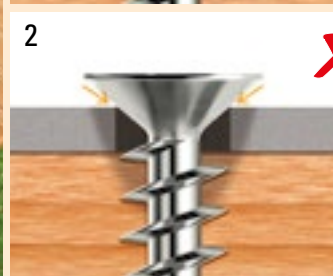
Large head TX recess screw suited for **fixing hardware for wood constructions** and for **assembling wood structures**.

**The TX recess** allows easy and fast screwing **without slipping**.

**FIXING HARDWARE**

**The large head** provides a strong **clamping pressure** and better hole coverage (fig. 1) than common countersunk head screws (fig. 2).

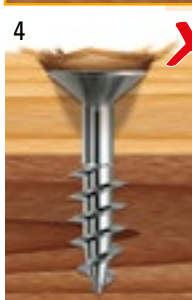
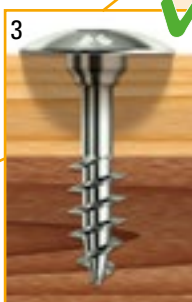
**The collar centres the hole** and provides axial holding functions.



**ASSEMBLY OF WOOD STRUCTURES**

**The large head and the partial thread** guarantee a high tightening **torque without damaging the screw surface** (fig. 3), as it commonly happens with a countersunk head screw (fig. 4).

The large head covers the hole and prevents **water infiltrations** that would damage the wood faster.



**CHROMITING® PROTECTIVE TREATMENT**

This iridescent white treatment guarantees **a much better rust protection than normal galvanisation treatments**.

**LUBRICATION LUBEX®**

**MUSTAD** antifriction treatment for **reducing fastening force by up to 50%**.



⚠ *Dimensional specifications, page 69.*

⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® FC

LARGE HEAD WITH COLLAR

Large Head with Collar  
**FC**

Recess  
**TX**



## CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameters [mm]	6	7
TX Recess	TX 30	TX 30
Mustad Type	029A / 312A	057A
Length/Thread [mm]		
<b>25</b>	•	
<b>30</b>	•	
<b>35</b>	•	
<b>40</b>	•	•
<b>50</b>	•	•
<b>60/Thr.</b>	•	•
<b>70/Thr.</b>	•	•
<b>80/Thr.</b>	•	•
<b>100/Thr.</b>	•	•
<b>120/Thr.</b>		•
<b>140/Thr.</b>		•
<b>160/Thr.</b>		•

Boxes

200 pieces

100 pieces

Thr: maximum thread length: Diameter 6: 70mm

Diameter 7: 50mm up to 7x100, 70 mm from 7x120

Items code:

Diameter 6: PV029A Diameter x Length C8C (up to length 50 mm)

PV312A Diameter x Length C8C (from length 60 mm)

Diameter 7: PV057A Diameter x Length C8C



EN 14592 : 2009

## HEX LAG SCREW

**KOVERVIT® AA**  
HARDENED HEX LAG SCREW FOR WOOD



**Special screw for fastening wood**, miscellaneous conglomerate materials, plywood, chipboards, wood-metal sheet sandwich structures, fibreglass and thin metal sheets **with no need for pre-boring**.

### HEX HEAD K 10

with sharp edges to guarantee a high transmission of the screwing torque.



### 30° ANGLE POINT

suitable for easily penetrating in all low-density materials. Threaded point and hard steel pierce roofing sheets directly with no need for pre-boring.

### CASE HARDENING TREATMENT

Confers two properties to the screw:

- **extra-hard surface** capable of withstanding high friction and force when threading;
- **tough, elastic core** to avoid breakage of screws.

**Tearing strength is double than that of a common hex lag screw even of larger diameter.**

### CHROMITING® PROTECTIVE TREATMENT

This iridescent white treatment guarantees **a much better rust protection than normal galvanisation treatments**.

⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# KOVERVIT® AA

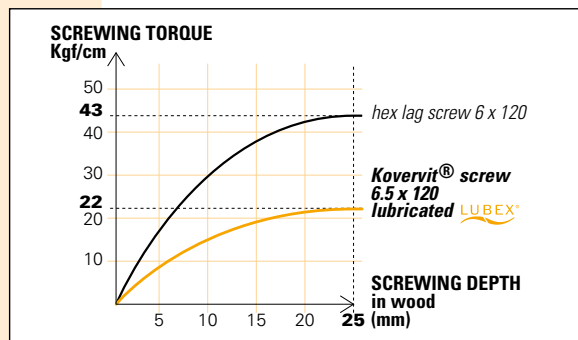
## HARDENED HEX LAG SCREW FOR WOOD

### LUBRICATION LUBEX®

The specific MUSTAD antifriction treatment reduces the screwing force by up to 50% with respect to a common hex lag screw even of smaller diameter.

### CE MARKING

For load-bearing timber assembly elements, **EN 14592:2009** (awarded by CSTB Centre Scientifique du Bâtiment, Paris). **DoP (Declaration of Performance)** issued according to the European Construction Products Regulation 305/2011.



Hex Head  
**KE**



### FOR WOOD AA CHROMITING® LUBRICATED LUBEX®

(Chromiting® description: page 10)

Diameter [mm]	6.5
Screw Drive N°	10
Mustad Type	811B
Length/Thread [mm]	
<b>40</b>	•
<b>50</b>	•
<b>60</b>	•
<b>70/60</b>	•
<b>80/60</b>	•
<b>90/60</b>	•
<b>100/60</b>	•
<b>110/60</b>	•
<b>120/60</b>	•
<b>130/60</b>	•
<b>140/60</b>	•
<b>150/60</b>	•
<b>160/60</b>	•
<b>180/60</b>	•
<b>200/60</b>	•

Boxes  
200 pieces

100 pieces

Items code: KV811B Diameter x Length C8C

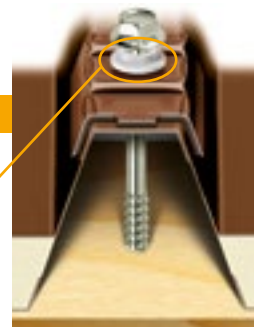


### WATERPROOF WASHER

200 pieces boxes.

Item code: REPC000000600CC

Specific to prevent water infiltrations when placing the panels.



**AF PT**  
Wood Massive Parquet



**AF TIP**

**Panelvit® AF PT**  
ANTI-SPLITTING FOR WOOD MASSIVE PARQUET

Specific screw for **fixing massive wood parquets.**



**The reduced head with milling ribs and TX hexalobular recess** bites into the wood without causing splitting while tightening. **The head completely penetrates into the wood to allow the interlocking of the next strip.** The TX recess transmits all the screwing force and prevents slipping and wear in the recess.

**Partial thread** for an optimal tightening on the wood support.

**The AF Anti-Splitting tip allows to tighten diagonally, without any pre-boring.**

**LUBRICATION LUBEX®**  
MUSTAD antifriction treatment for **reducing fastening force by up to 50%.**



- ⚠ *Dimensional specifications, page 69.*
- ⚠ *Thermal, protective and lubrication treatment specifications, pages 7-10.*



# Panelvit® AF PT

ANTI-SPLITTING FOR WOOD MASSIVE PARQUET

Countersunk Head  
**CSK**

Recess  
**TX**



AF TIP



**CHROMITING® LUBRICATED LUBEX®**

(Chromiting® description: page 10)

Diameters [mm]	<b>3.5</b>
TX Recess	TX 10
Mustad Type	427A
Length/Thread [mm]	
<b>45/30</b>	•

Items code: AF427A Diameter x Length C8C

Boxes
500 pieces

# PF TX INOX

Decking Screw

# Panelvit® PF TX INOX

DECKING SCREW



Specific screw for **outdoor applications** for making terraces, swimming pool decks and piers.

Made of austenitic stainless steel A2 to guarantee **excellent corrosion and rust prevention**.

### The reduced head with milling ribs and TX recess

bites into the wood without causing splitting while tightening. The very deep TX recess transmits screwing torque and avoids the risk of stripping.

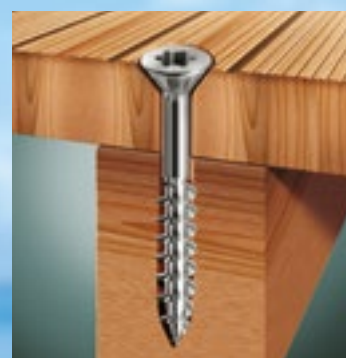
### Partial threading

provides the pulling action needed to approach the deck to the support even if the elements are not straight.

**Choice of the screw depending on the thickness of the deck to be fixed:**

Deck thickness ≤ 20 mm = screw 5 x 50

Deck thickness > 20 mm = screw 5 x 60 / 5 x 70



### PASSIVATION TREATMENT

confers a brilliant, shiny and long-lasting finish.

### LUBRICATION LUBEX®

MUSTAD antifriction treatment for **reducing fastening force by up to 50%**.

Pre-boring is recommended in case of very hard wood.

 *Technical specifications and sizes, page 69.*



# Panelvit® PF<sub>TX</sub> INOX

DECKING SCREW

Countersunk Head  
**CSK**

Recess  
**TX**



**PASSIVATED LUBRICATED** LUBEX®

## BOXES

## BUCKETS

Diameters [mm]

**5**

TX Recess

TX 20

Mustad Type

340I

Length/Thread [mm]

**50/30**

•

**60/34**

•

**70/43**

•



200 pieces



+ bit TX 20  
INOX A2

400 pieces + bit TX 20

300 pieces + bit TX 20

Items code: PF340I Diameter x Length PSC

Items code: PF340I Diameter x Length PSB





# ***ASSORTED CASES DISPLAYS***



## METAL CASE

# Mustad Box

ASSORTED METAL CASE



### Features:

- **Robust, professional case** with safety lock to prevent accidental opening.
- Content: **1910 assorted screws**.
- Assortment of **15 sizes of Panelvit® lubricated LUBEX® screws with TX recess and Chromiting®**, chosen within the most common.
- Ideal to have an **assortment of universal screws** always at hand, **with the same TX 20 recess for all diameters**.
- Indication of the tool to be used for fastening.
- Gauge for measuring screw diameter and length.



Dimensions	Quantity (Pcs.)
<b>3.5 x 16</b>	<b>250</b>
<b>3.5 x 20</b>	<b>200</b>
<b>3.5 x 25</b>	<b>180</b>
<b>3.5 x 30</b>	<b>100</b>
<b>4 x 20</b>	<b>180</b>
<b>4 x 25</b>	<b>150</b>
<b>4 x 30</b>	<b>170</b>
<b>4 x 35</b>	<b>140</b>
<b>4 x 40</b>	<b>110</b>
<b>4 x 50</b>	<b>90</b>
<b>4.5 x 40</b>	<b>60</b>
<b>4.5 x 50</b>	<b>60</b>
<b>5 x 40</b>	<b>90</b>
<b>5 x 50</b>	<b>70</b>
<b>5 x 60</b>	<b>60</b>
<b>TOTAL SCREWS</b>	<b>1910</b>

Item code: MBPV001501910C8



### Features:

- Transparent, robust and anti-scratches **plastic case**.
- Content: **670 assorted screws**.
- Assortment of **16 sizes of bronzed Panelvit® lubricated LUBEX® with TX recess**, chosen within the most common.
- Back label with the indication of each compartment's content.



Dimensions	Quantity (Pcs.)
<b>2.5 x 12</b>	<b>100</b>
<b>2.5 x 20</b>	<b>80</b>
<b>3 x 12</b>	<b>100</b>
<b>3 x 16</b>	<b>80</b>
<b>3 x 20</b>	<b>60</b>
<b>3.5 x 16</b>	<b>30</b>
<b>3.5 x 20</b>	<b>30</b>
<b>3.5 x 25</b>	<b>20</b>
<b>3.5 x 30</b>	<b>20</b>
<b>3.5 x 35</b>	<b>20</b>
<b>4 x 16</b>	<b>30</b>
<b>4 x 20</b>	<b>30</b>
<b>4 x 25</b>	<b>20</b>
<b>4 x 30</b>	<b>20</b>
<b>4 x 35</b>	<b>15</b>
<b>4 x 40</b>	<b>15</b>
<b>TOTAL SCREWS</b>	<b>670</b>
Item code: MBPV001600670BZ	


FOR BOXES

# Mustad Expo



Features of the Mustad Expo for boxes:

- Module base sizes:  
(H x L x D) m 2 x 1 x 0.5.
- **Self-bearing structure**,  
no anchoring to wall needed.
- **5 shelves per module**,  
maximum capacity 50 Kg each.
- **High display capacity**:  
each display unit can contain  
up to **45 references** in  
commercial boxes.

Lot reference number	EAN 13 Barcode	Content
LOT. N. 12345678	8 014174 044151	<b>200</b> PZ / PCS
CODE PFACZP400600C8C		MADE IN ITALY CE EN 14592 : 2009
S/PIANA TETE FRAISEE COUNTERSUNK 4 x 60	<b>PUSH</b>	
<b>Panelvit® PF</b>		PZ 2
<b>CHROMITING® + LUBEX®</b> ALTA RESISTENZA CORROSIONE PROTECTION CORROSION ELEVÉE HIGH CORROSION RESISTANCE	<b>200</b> PZ PCS	
<b>4 x 60</b>		
Coating	Screw size	Fastening tool
Item code		Item picture

CE marking according to EN 14592:2009

100% Made in Italy

- **Samples display.**

Features of the Mustad Expo for bulk sale:

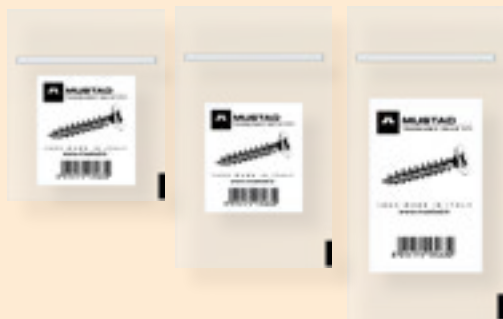
- Module base sizes:  
(H x L x D) m 2 x 1 x 0.5.
- **Self-bearing structure**,  
no anchoring to wall needed.
- **5 shelves per module**,  
maximum capacity 50 Kg each.
- **High display capacity**:  
each display unit can contain **40 carton boxes** for bulk sale.
- **The customer can buy the item/  
quantity he prefers. He has to fill the  
desired size bag** and then pay it to the  
cash desk.

Resealable bags. Available in 3 different sizes with barcode:

*small*

*medium*

*large*

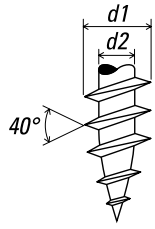


**The Mustad Expo kit** for bulk sale includes:

- 1 display unit (m 2 x 1 x 0.5)
- 40 carton boxes
- Labels of the items
- 1,000 bags in 3 sizes
- 3 hooks to place bags on the display



# DIMENSIONAL SPECIFICATIONS



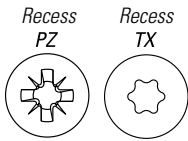
OGIVE-SHAPED TIP

## THREADING

(sizes in mm)

Nominal diameter	2.5	3	3.5	4	4.5	5	6
<b>d1</b>	max.	2.55	3.05	3.55	4.05	4.55	6.05
	min.	2.36	2.86	3.32	3.82	4.32	5.82
<b>d2</b>	max.	1.59	1.99	2.35	2.67	2.81	3.75
	min.	1.40	1.80	2.12	2.44	2.58	3.52

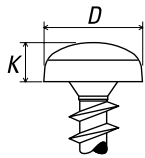
Maximum thread length 70 mm



## RECESSES

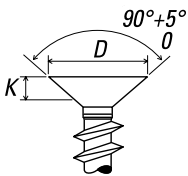
(sizes in mm)

Nominal diameter	2.5	3	3.5	4	4.5	5	6
PZ Recess N°	Z1	Z1	Z2	Z2	Z2	Z2	Z3
TX Recess N°	-	T10	T20	T20	T20	T20	T30



## PAN HEAD

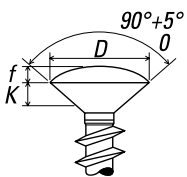
<b>D</b>	max.	4.90	5.90	6.90	7.90	8.80	9.80	11.75
	min.	4.60	5.60	6.54	7.54	8.44	9.44	11.32
<b>K</b>	max.	2.00	2.25	2.60	2.80	3.00	3.50	4.10



## COUNTERSUNK HEAD

(CSK)

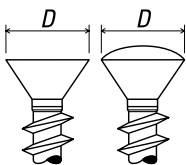
<b>D</b>	max.	5.00	6.00	7.00	8.00	9.00	10.00	12.00
	min.	4.70	5.70	6.64	7.64	8.64	9.64	11.57
<b>K</b>	max.	1.40	1.80	2.00	2.35	2.55	2.85	3.35



## COUNTERSUNK RAISED HEAD

(CSKR)

<b>D</b>	max.	5.00	6.00	7.00	8.00	9.00	10.00	12.00
	min.	4.70	5.70	6.64	7.64	8.64	9.64	11.57
<b>f</b>		0.71	0.66	0.89	1.02	1.17	1.17	1.57
<b>K</b>	max.	1.40	1.80	2.00	2.35	2.55	2.85	3.35



## REDUCED HEAD

(AF - TD)

<b>D</b>	max.			6.00	7.00		9.00	
	min.			5.70	6.64		8.64	



## LARGE HEAD WITH COLLAR

(FC)

Ø thread: 5 mm	947B type	Ø collar: 5.80 mm	Ø head: 11 mm	PZ 2 Recess
Ø thread: 5.5 mm	208A type	Ø collar: 5.90 mm	Ø head: 12.70 mm	TX 30 Recess
Ø thread: 6 mm	029B/312A type	Ø collar: 5.90 mm	Ø head: 15 mm	TX 30 Recess
Ø thread: 7 mm	057A type	Ø collar: 7 mm	Ø head: 17 mm	TX 30 Recess

## IMPORTANT NOTICE

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All MUSTAD screws are subject to constant technological evolution that could lead to technical improvements. It is recommended to use them according to MUSTAD indications, respecting current safety rules.



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