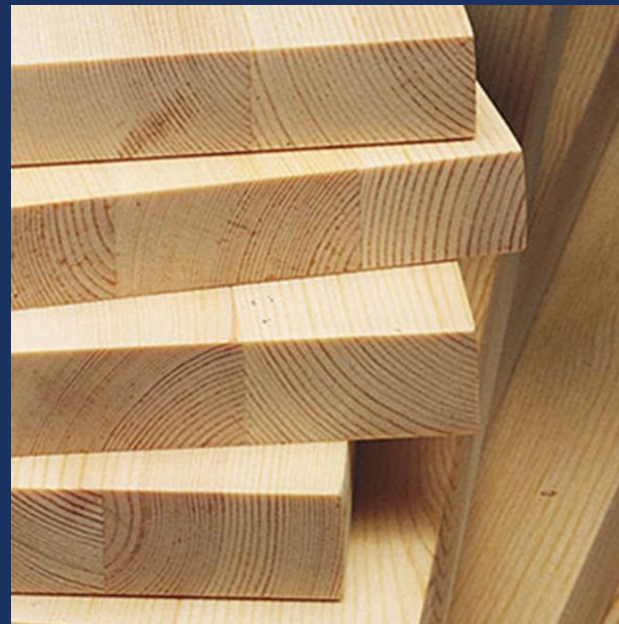


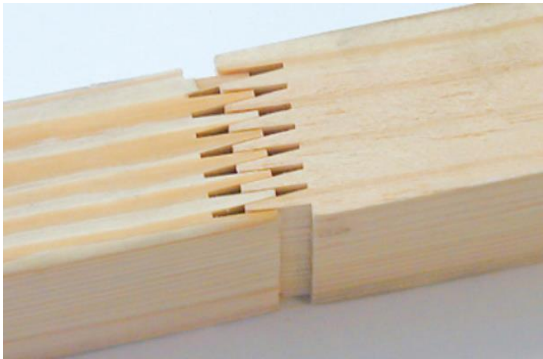
# SPOJEVI U KONSTRUKCIJAMA PROIZVODA OD DRVETA

SPAJANJE  
(NASTAVLJANJE) ELEMENATA  
PO ŠIRINI

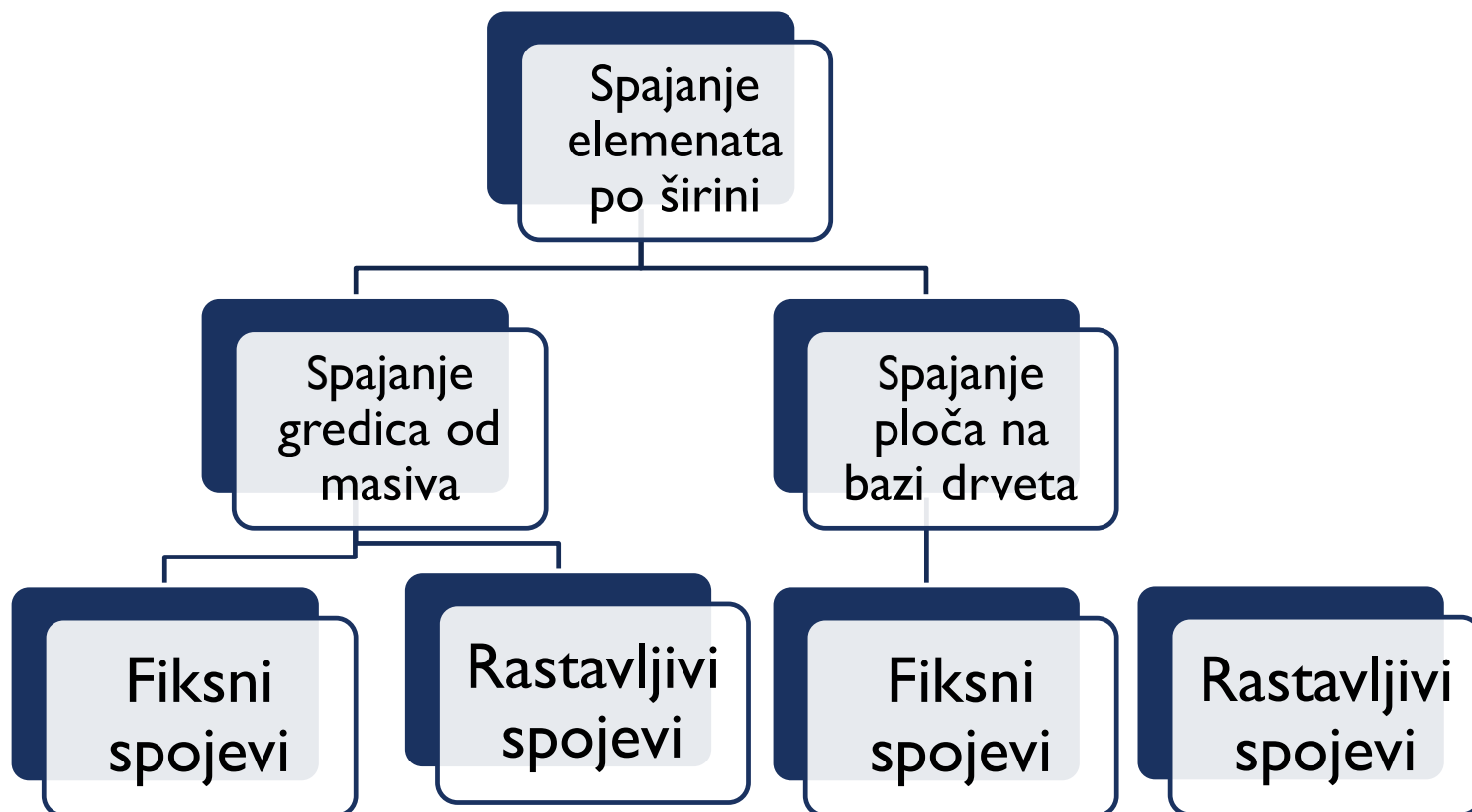


# SPAJANJE ELEMENATA RADI POVEĆANJA MERA

- Spajanje po dužini
- **Spajanje po širini**
- Spajanje po debljini



# SPAJANJE ELEMENATA PO ŠIRINI



# SPAJANJE (NASTAVLJANJE) ELEMENATA PO ŠIRINI

SPAJANJE GREDICA OD MASIVA PO ŠIRINI

FIKSNI SPOJEVI



## Spajanje gredica po širini sa lepkom



# PRAVILA

faktor	uslov
Širina gredice	200mm
Širina lamela	80/100mm
Površina lepljenja	A!!
Način slaganja	Pravac godova ( <b>s-s/b-b</b> ili <b>l-d/l-d</b> )
Krivljenje ploče	Ukrućenje (kušak ili krajnjak)
Promena dimenzija ploče	Tolerancija (EN)

## Spajanje gredica po širini sa lepkom

# PRAVILA



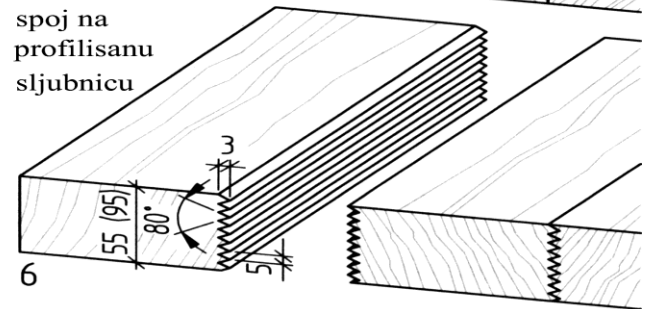
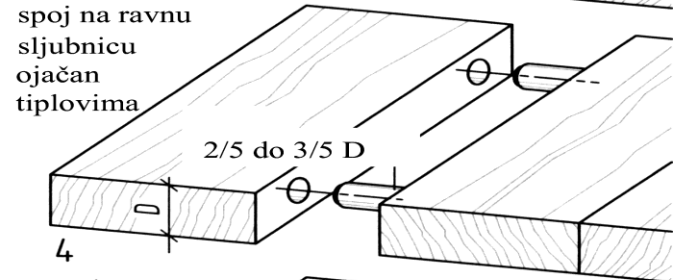
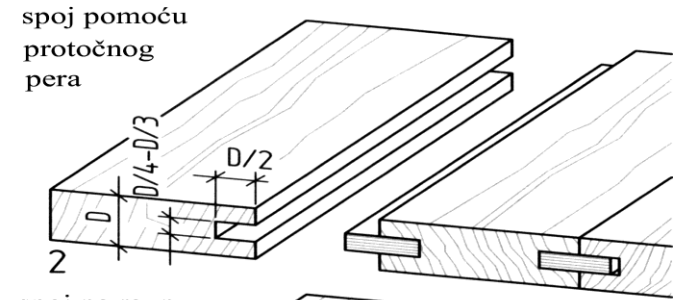
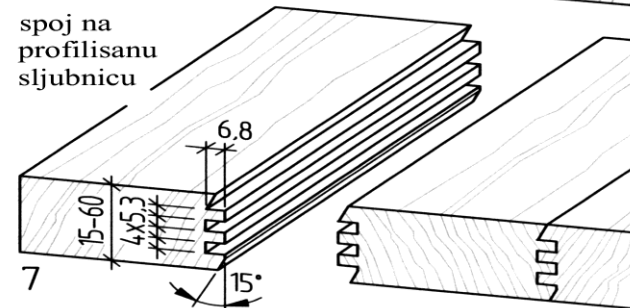
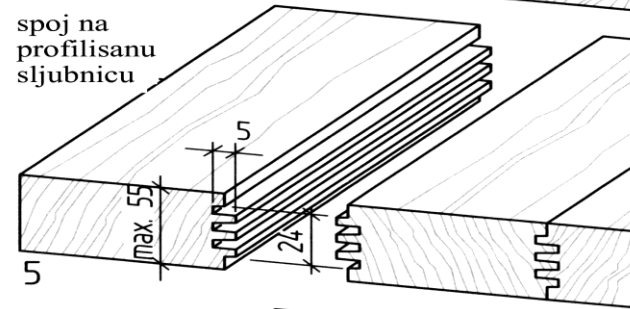
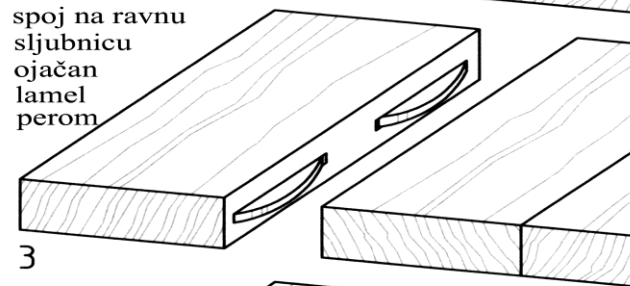
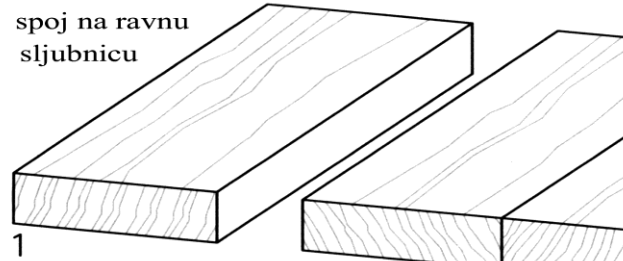
faktor	uslov
Širina gredice	200mm
Širina lamela	80/100mm



## Elementi veze

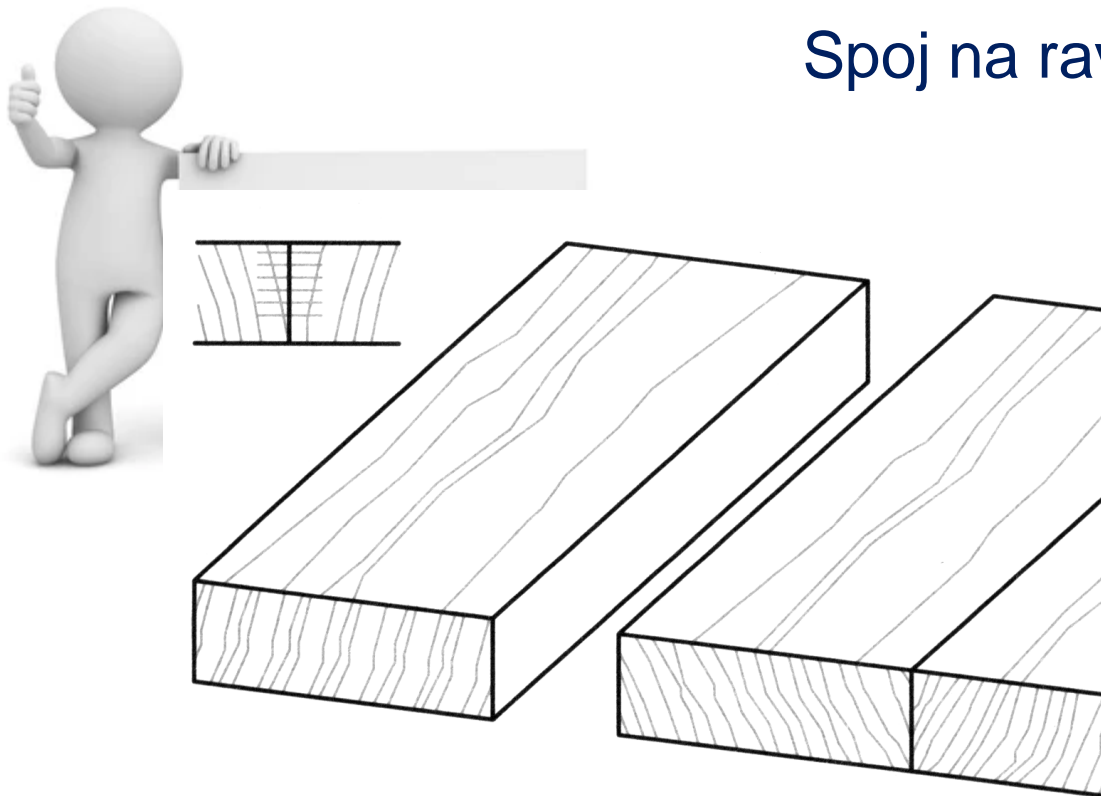


## Primena prednosti/mane



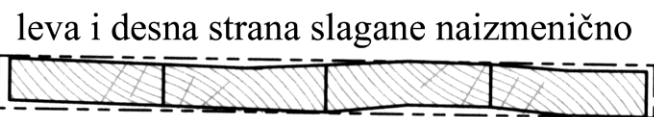
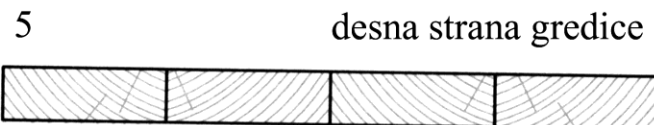
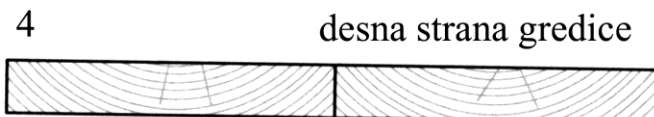
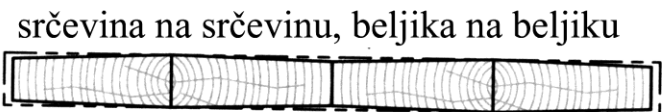
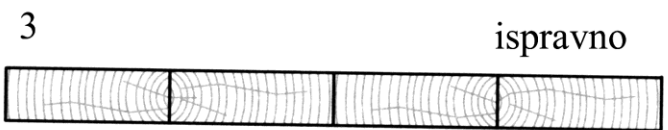
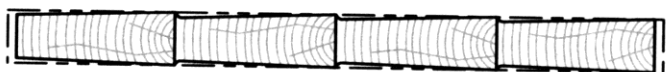
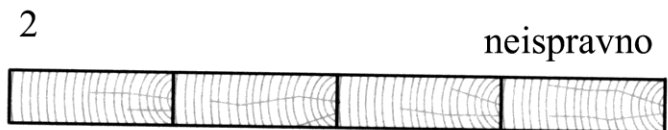
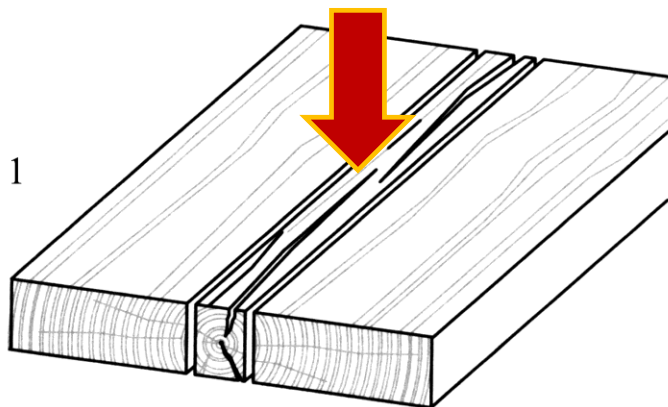
- A!
- Zahtev tržišta
- Vidljivost spoja
- Debljina ploče

## Spoj na ravnu sljubnicu





# Princip slaganja gredica od masivnog drveta pri proizvodnji ploča



# GREŠKE OBLIKA

- ❖ Greške dimenzija
- ❖ **Greške oblika**
- ❖ Greške uzajamnog položaja površina i linija
- ❖ Greške kvaliteta obrađenih površina (hrapavost)

Greške pravosti linija

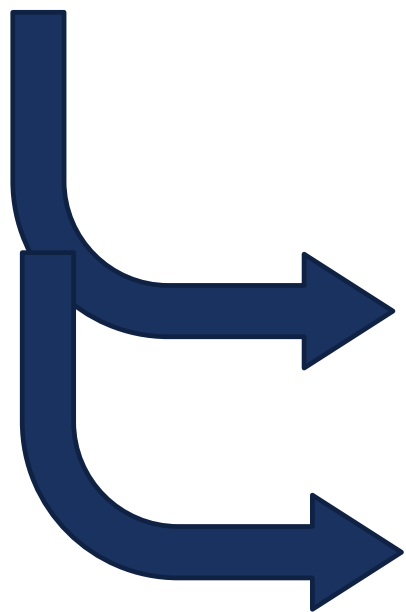
**Greške ravnosti  
površina**

Greške kružnosti

Greške cilindričnosti



**Sprečavanje promene oblika (krivljenja) ploča od masivnog drveta**

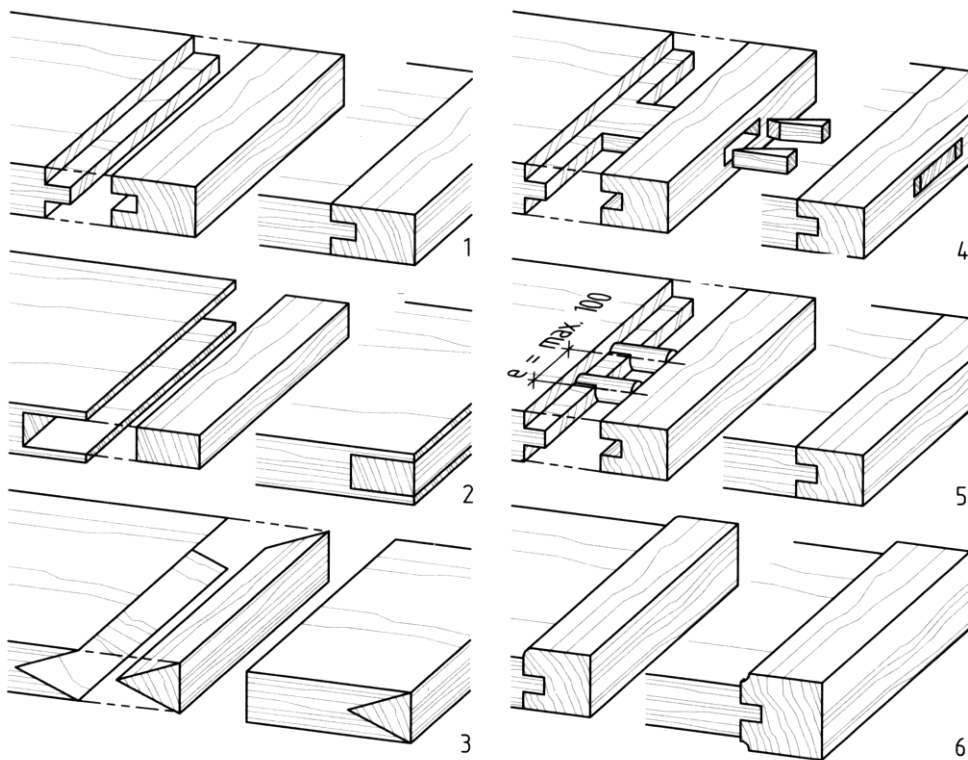
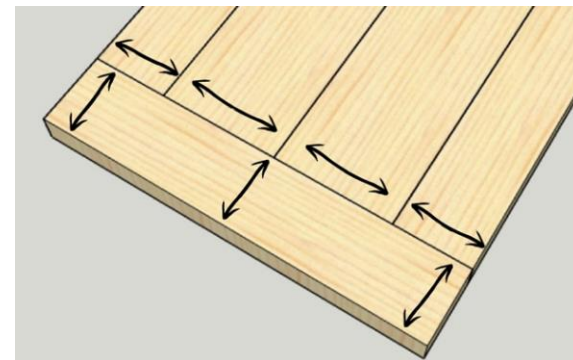


Primena krajnjaka

Primena kušaka



## Sprečavanje promene oblika ploča od masivnog drveta primenom KRAJNJAKA/ČEONE LETVE



1. Primena čeone letve – krajnjaka (pero-utor)
2. i 3. Primena čeone letve – krajnjaka (utor)
4. Primena čeone letve – krajnjaka ojačanog čepom-žljebom i klinovima
5. Primena čeone letve – krajnjaka ojačanog tiplovima
6. Primena čeone letve – krajnjaka (pero-utor, krajnjak deblji od ploče)



Pero sa ovalnim  
žljebom

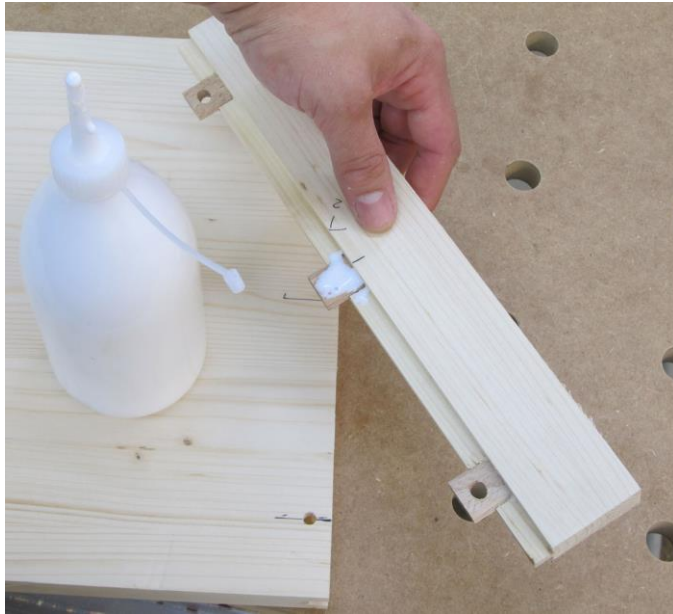
tipl

pero

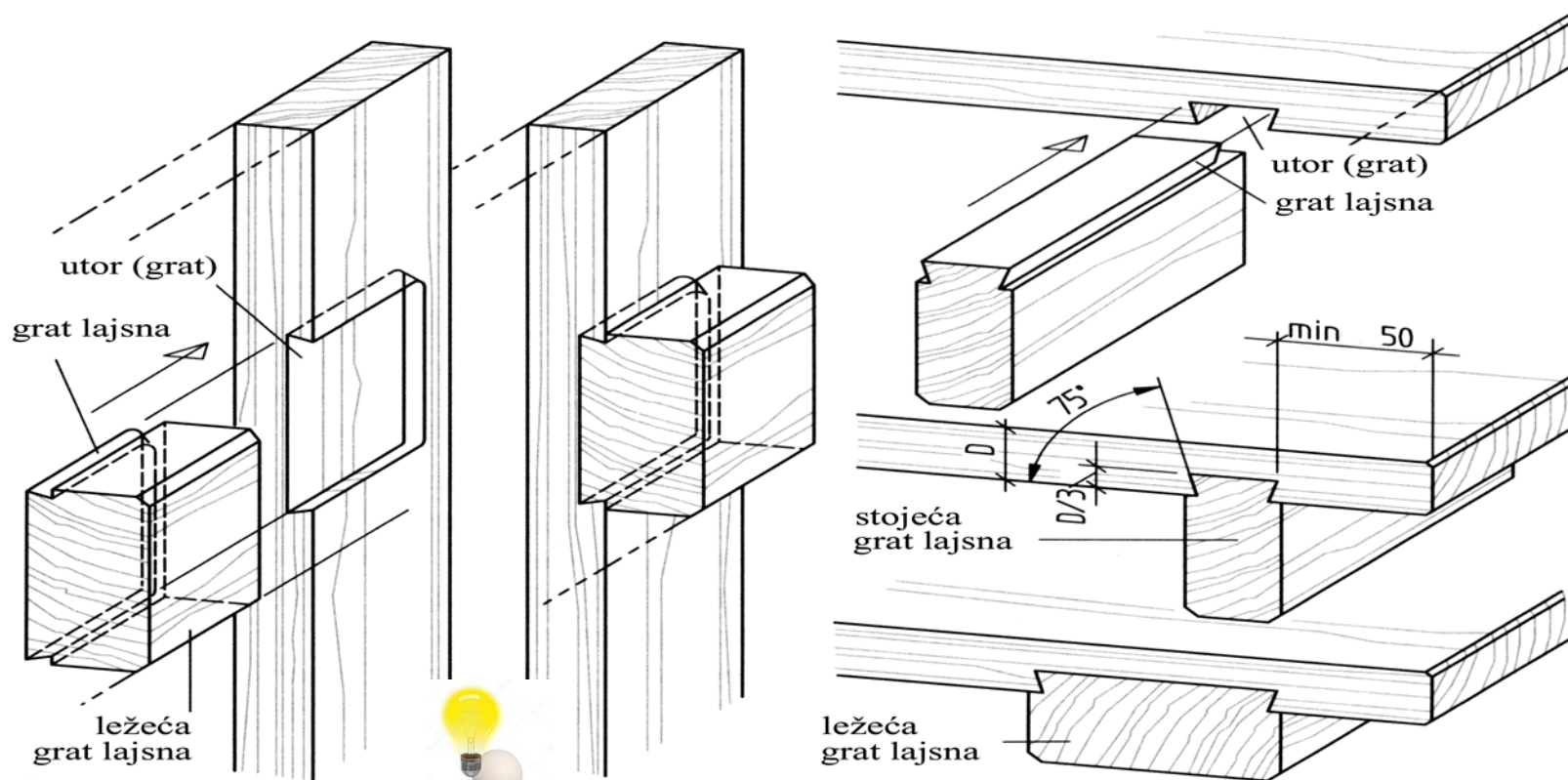
krajnjak

Rupa za tipl





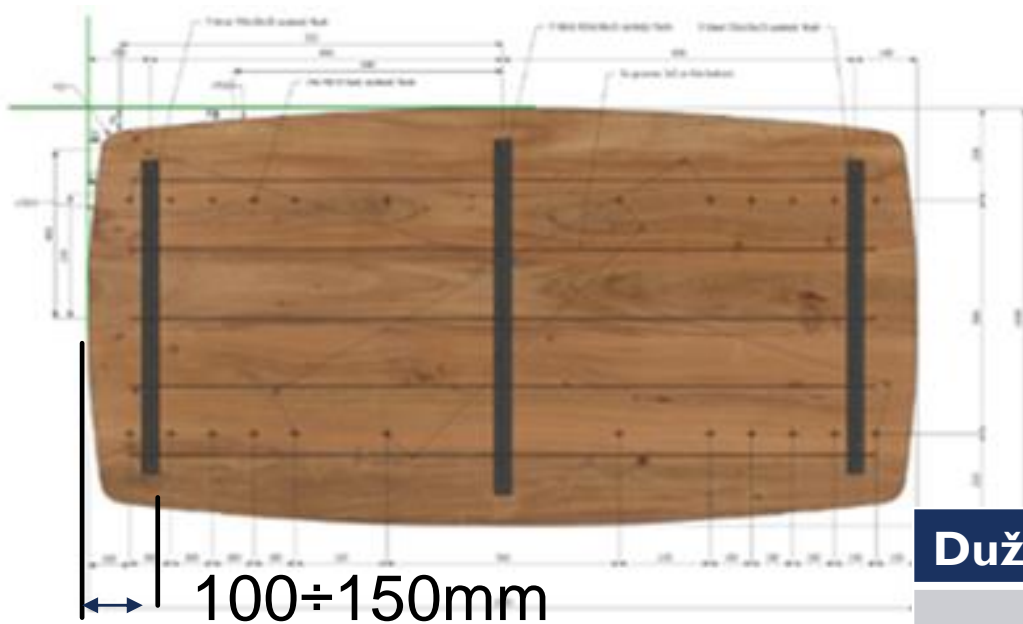
# Sprečavanje promene oblika ploča od masivnog drveta primenom KUŠAKA (drvenog ili metalnog)



Moment inercije!!!



# POZICIJA I BROJ KUŠAKA



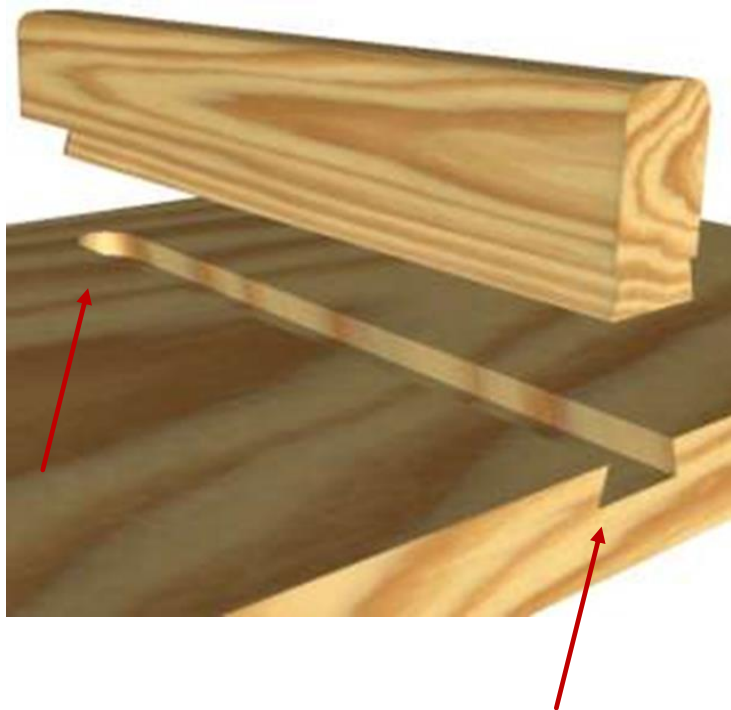
Dužina ploča (mm)	Br.kušaka
<500	2
500÷1000	3
1000÷1500	3
1500÷2000	3/4
>2000	4/5

Sprečavanje promene oblika ploča od masivnog drveta primenom **drvenog** kušaka



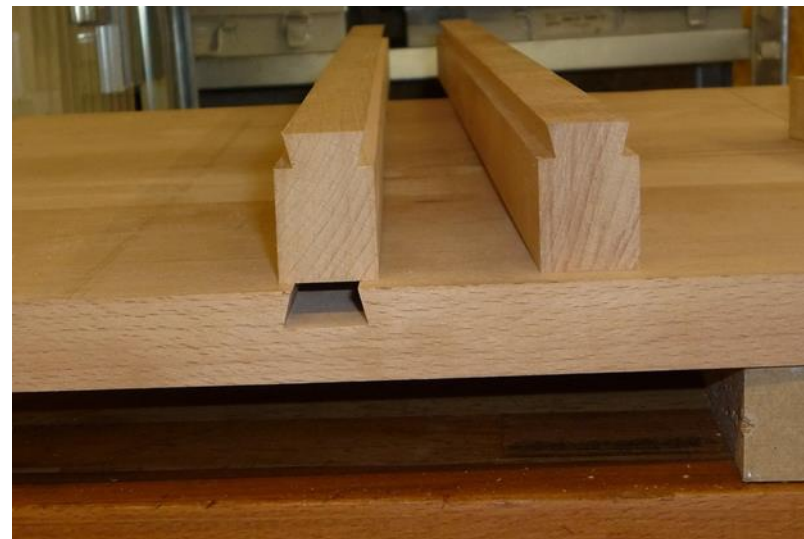
# SPREČAVANJE PROMENE OBLIKA PLOČA OD MASIVNOG DRVETA PRIMENOM DRVENOG KUŠAKA

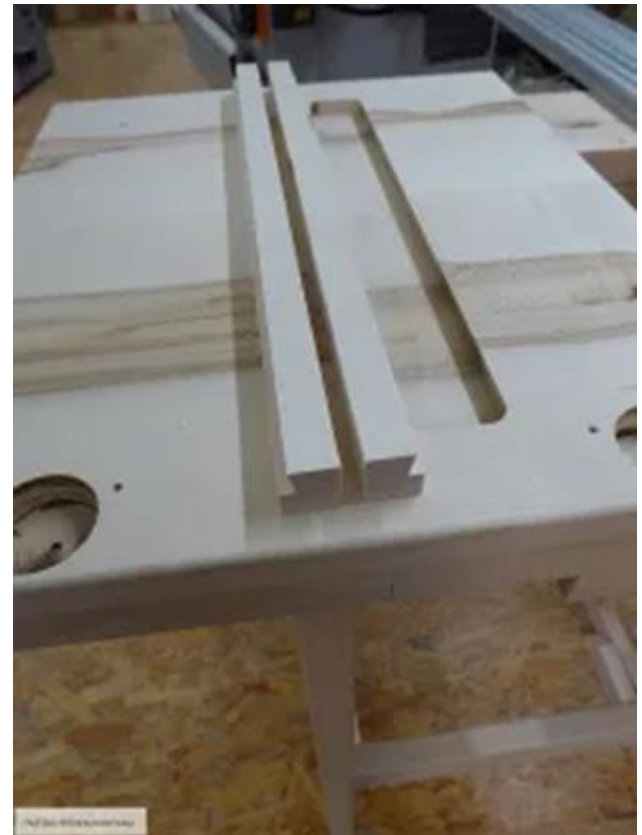
Otvoren sa jedne strane



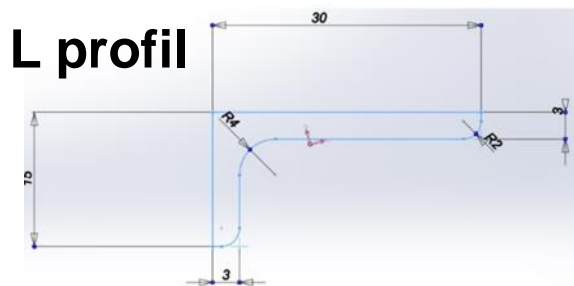
Otvoren sa obe strane







# Sprečavanje promene oblika ploča od masivnog drveta primenom metalnog kušaka



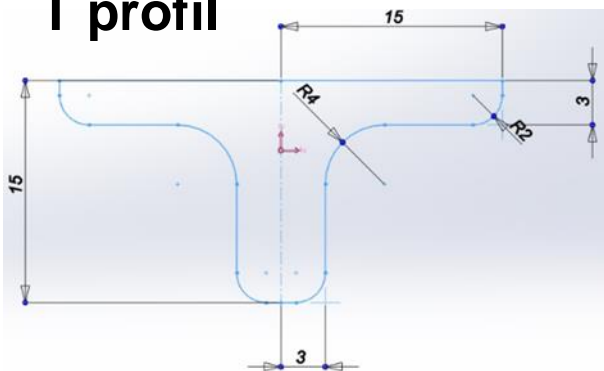
### V profil



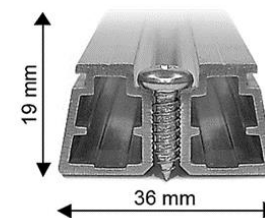
### U profil



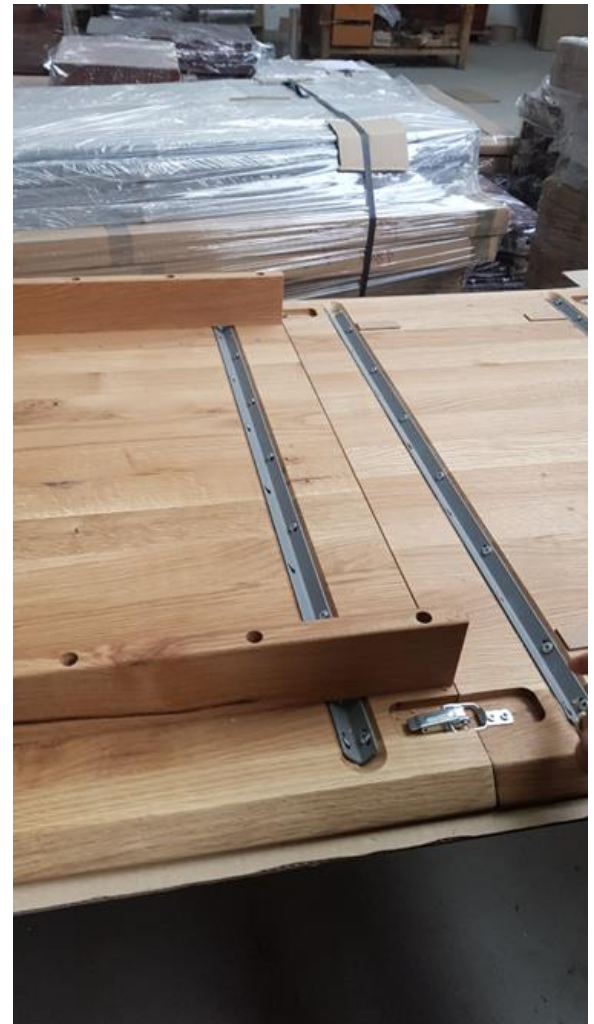
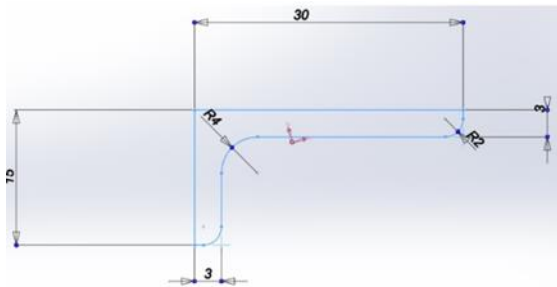
### T profil



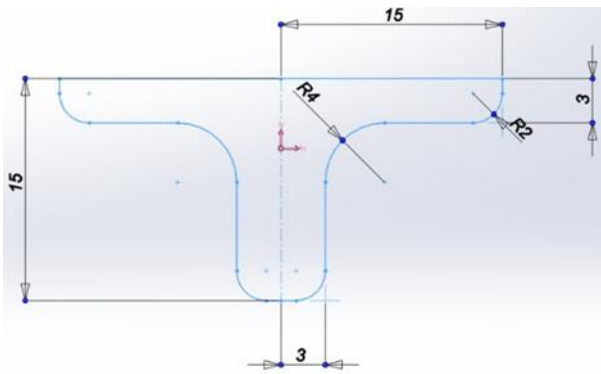
### trapez



# L PROFIL

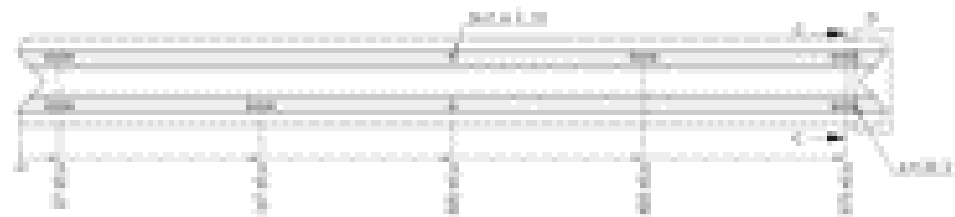
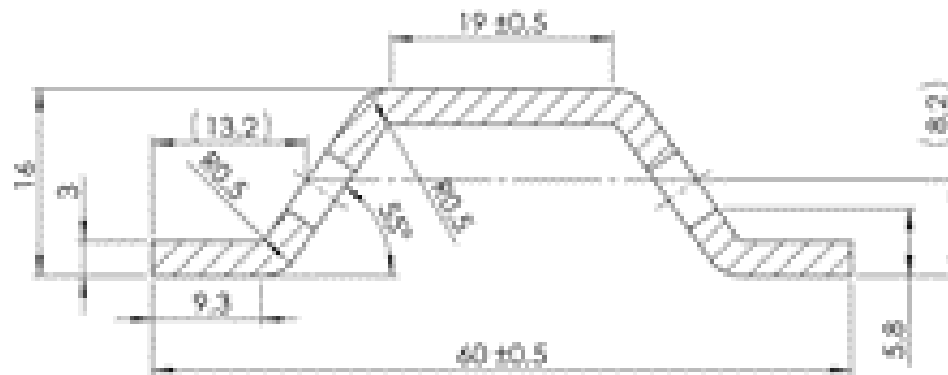


# T PROFIL





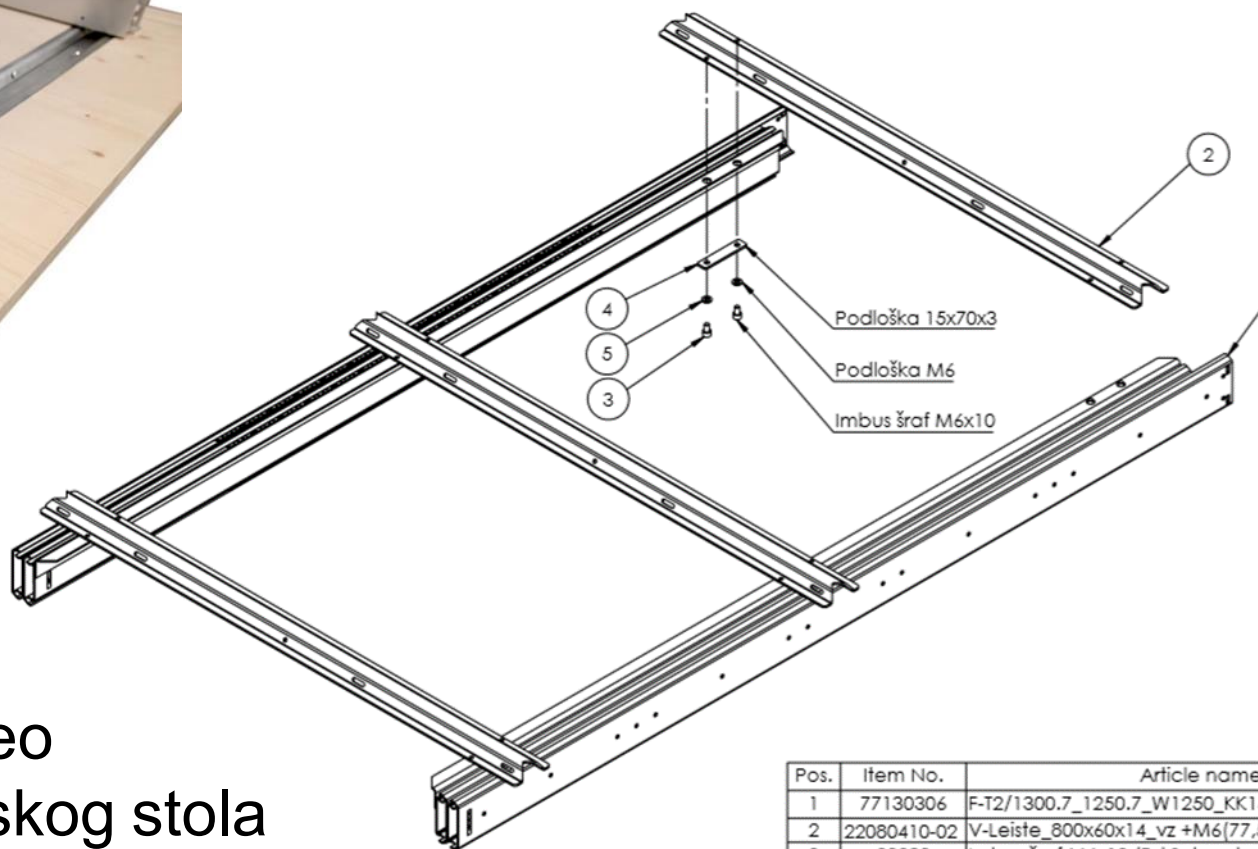
# V PROFIL



# V PROFIL

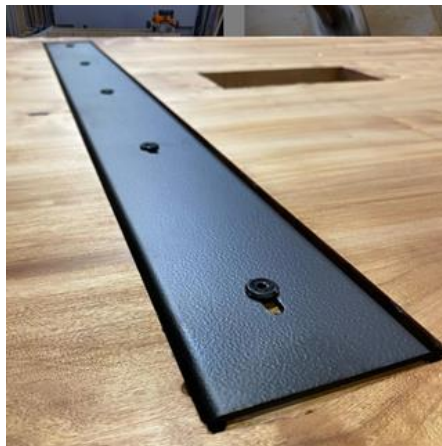


# V PROFIL

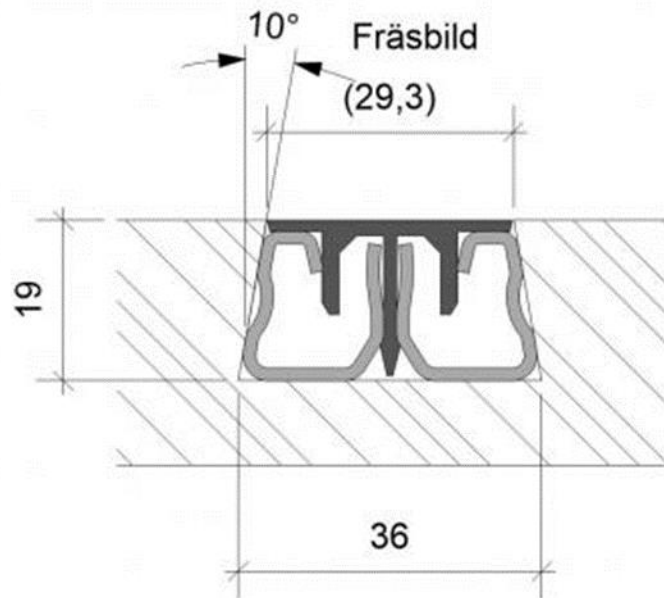
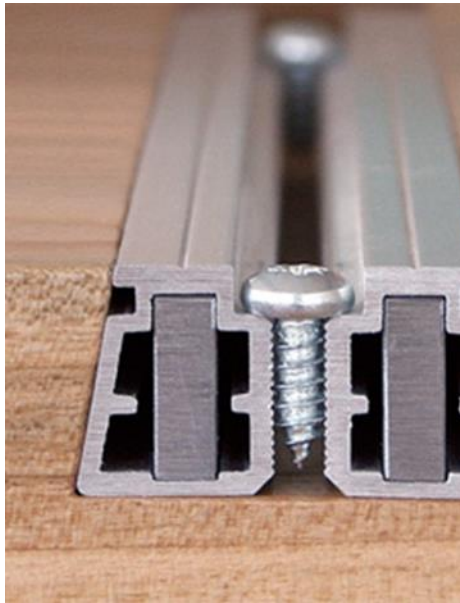


Metalni kušak kao deo klizača kod trpezarijskog stola

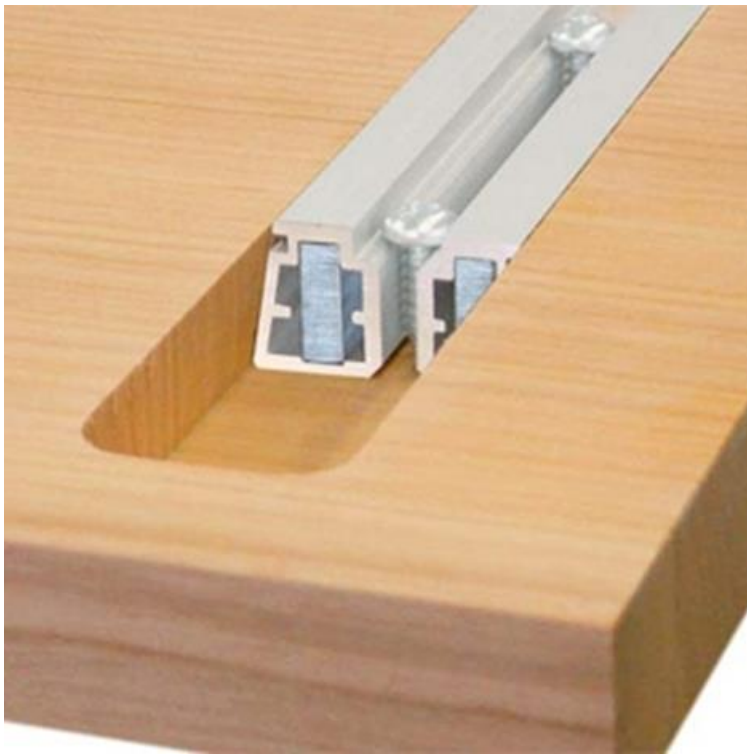
# U PROFIL



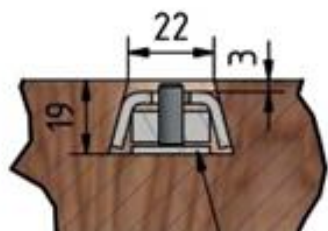
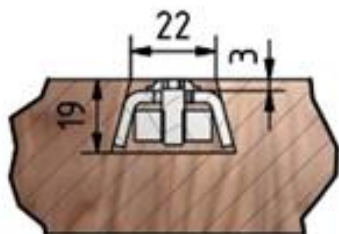
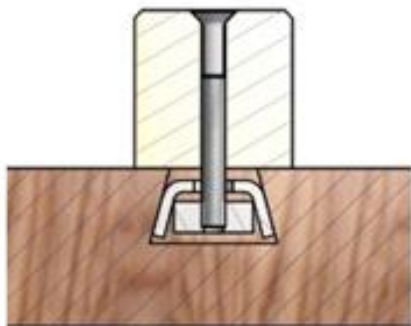
# TRAPEZ KUŠAK



# TRAPEZ KUŠAK



# TRAPEZ KUŠAK



# SPAJANJE (NASTAVLJANJE) ELEMENATA PO ŠIRINI

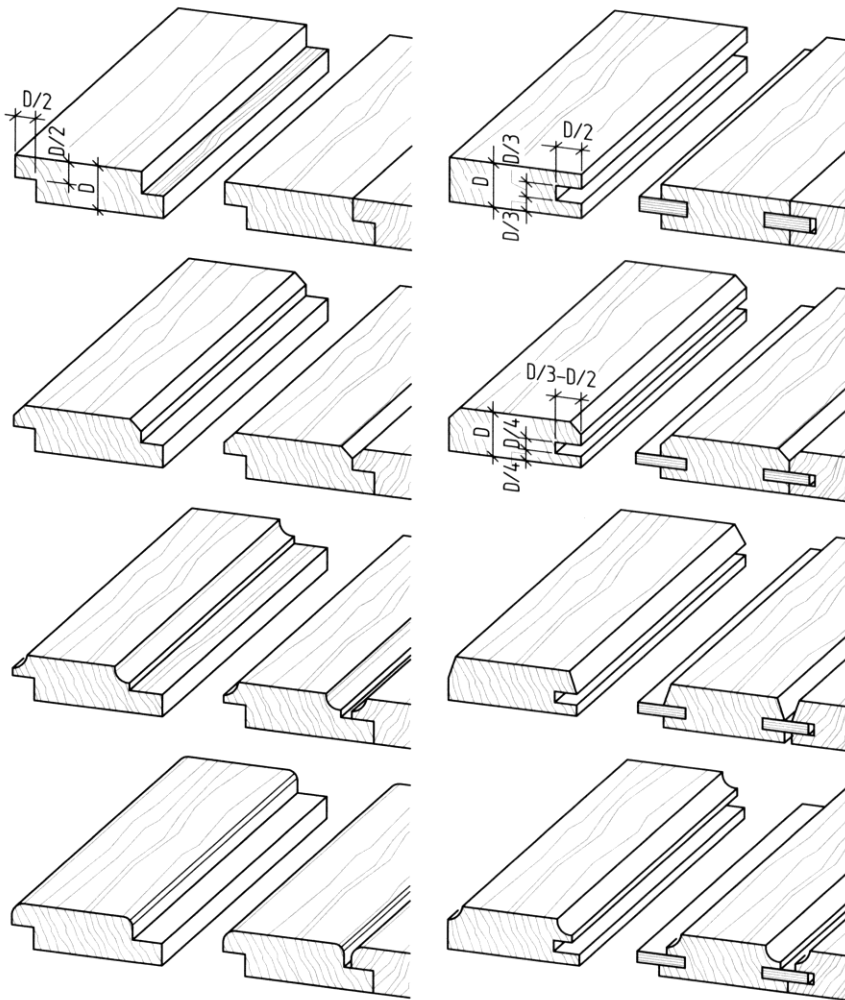
SPAJANJE GREDICA OD MASIVA PO ŠIRINI

RASTAVLJIVI SPOJEVI

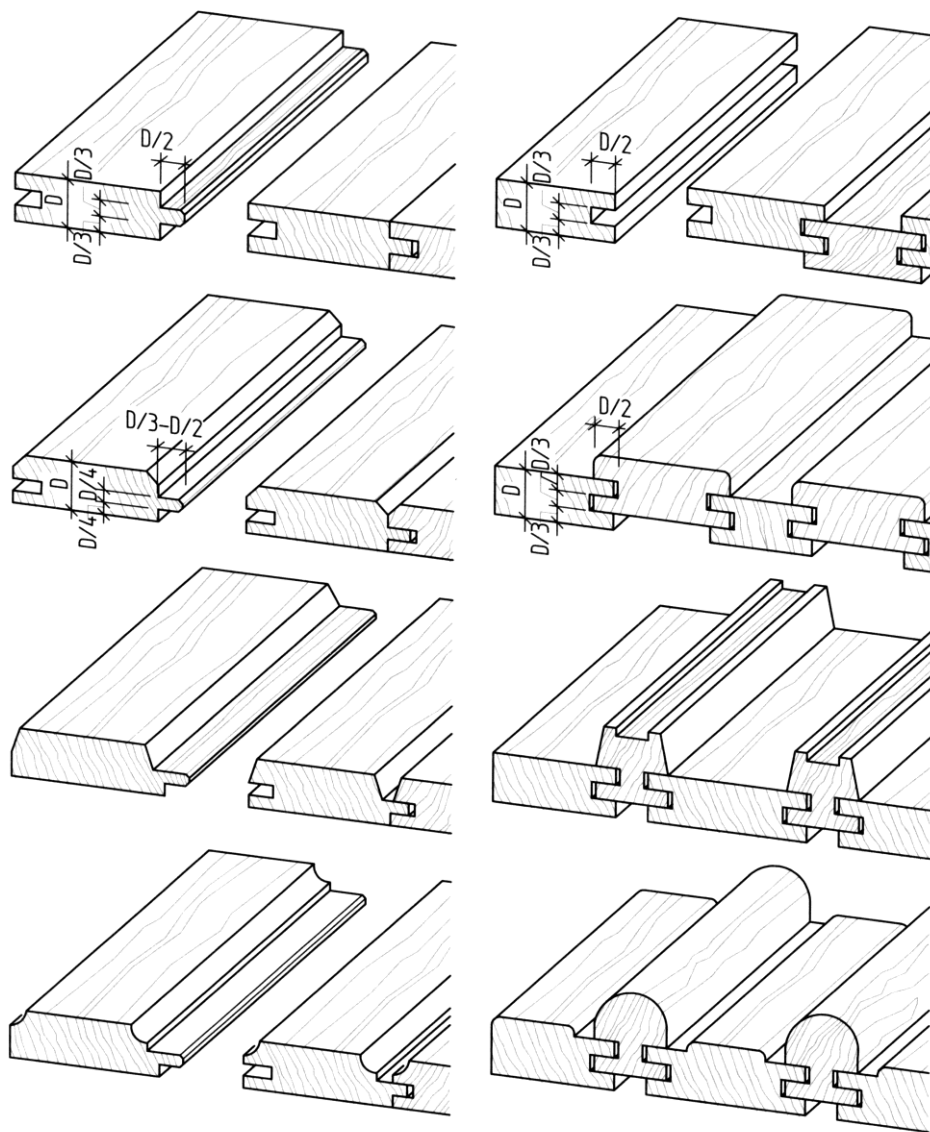




# SPAJANJE GREDICA PO ŠIRINI BEZ LEPKA



Spajanje gredica po širini na preklop i pomoću umetnutog pera.



Spajanje gredica po širini na pero i utor

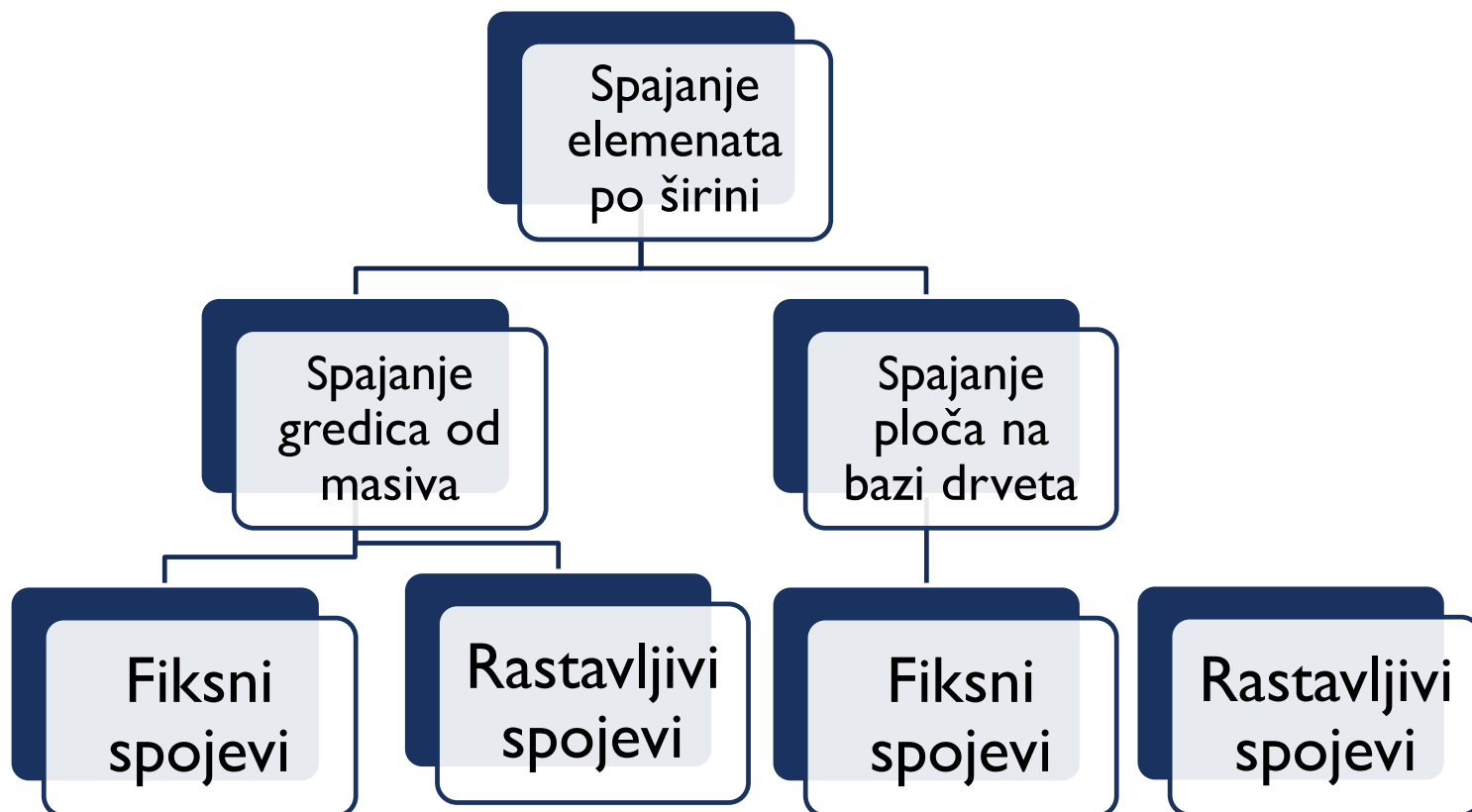
# SPAJANJE (NASTAVLJANJE) ELEMENATA PO ŠIRINI

SPAJANJE GREDICA OD MASIVA PO ŠIRINI

FIKSNI SPOJEVI



# SPAJANJE ELEMENATA PO ŠIRINI



# SPAJANJE PO ŠIRINI PLOČA NA BAZI DRVETA

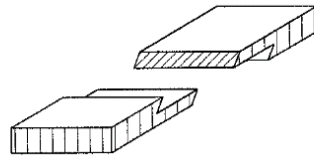
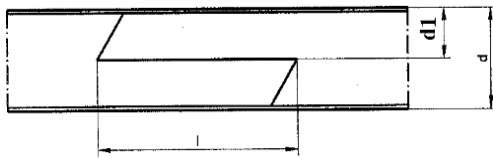
U osnovne spojeve po **širini/dužini** spadaju:

- Preklopni spojevi
- Spojevi sa čepom i prorezom
- Spojevi sa okovom – rastavljivi spojevi

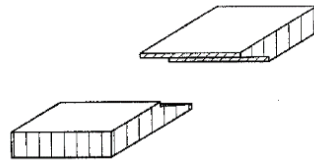
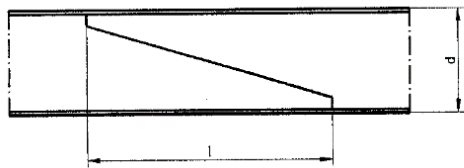
## Preklopni spojevi

### Spojevi sa čepom i prorezom

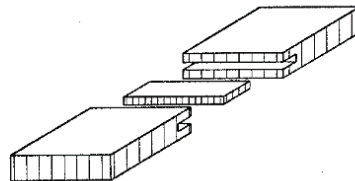
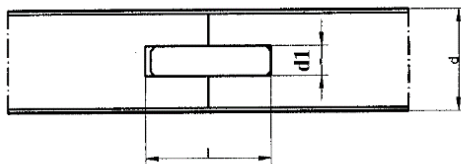
### Spojevi sa okovom – rastavljivi spojevi



Spoj na ravni bočni  
preklop i kosi sudar



Spoj na kosi bočni  
preklop i kosi sudar



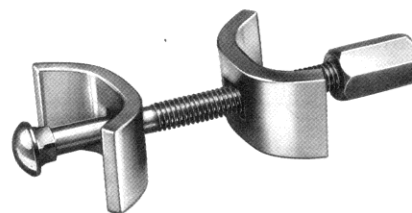
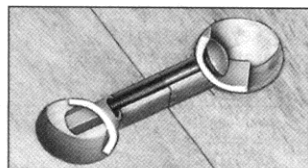
Spoj na ravni bočni  
preklop sa umetnutim  
perom



## Preklopni spojevi

Spojevi sa čepom i prorezom

Spojevi sa okovom – rastavljivi spojevi



### Recessed worktop connectors

Finish: steel, galvanized

Length	Drilling distance dim. B	Cat. No.
65 mm	32 to 41 mm	262.96.211
150 mm	75 to 84 mm	262.96.220

Packing: 50 and 150 pcs.

