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03

ANGLE BRACKETS

# ANGLE BRACKETS

## ANGLE BRACKETS TOP 80 / TOP 120

### Advantages

- No bothersome centre rib during processing
- Optimised hole pattern
- Full nail fitting always possible
- High stability due to special, discreet corrugation
- Type 80 as an alternative to the "size 90 bracket"
- **GREENLINE** = resource-saving manufacturing



Introduction to statics **from page 110** / Products & statics **from page 120**

## ANGLE BRACKET 110/170 S

### Advantages

- Universal use for higher loads
- 9 bolt holes Ø 13 mm
- Perfectly suited to take loads  $F_2$  and  $F_3$

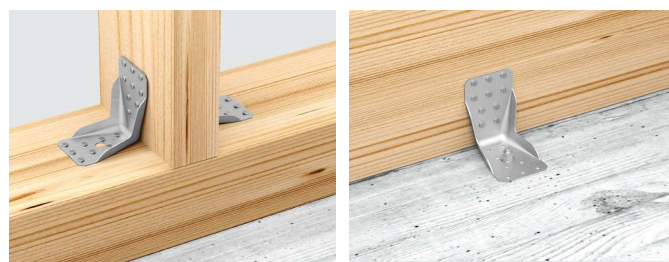


Introduction to statics **from page 110** / Products & statics **from page 132**

## ANGLE BRACKET TOP KR 90E (EXTRA)

### Advantages

- 40 % lighter in comparison to 90 x 90 x 65 x 2.5 mm
- High stability due to raised edge on both sides
- Versatile in use
- Alternative to different brackets such as 70 x 70 x 55 mm and 90 x 90 x 65 mm (for use under consideration of the necessary loads)
- Very good for loads due to the outer rib  $F_2/F_3$  and  $F_1$  suitable



Introduction to statics **from page 110** / Products & statics **from page 124**

## ANGLE BRACKETS KR

### Advantages

- For connections between timber/timber; timber/concrete  
For use on timber/masonry etc.
- Due to the ribs in the bending radius, KR angle brackets are very sturdy, economical and affordable in use for extreme loads
- By making use of the Greenline series, you receive products with resource-saving manufacturing. This gives you an ecologically and economic advantage
















































































































Introduction to statics **from page 110** / Products & statics **from page 134**








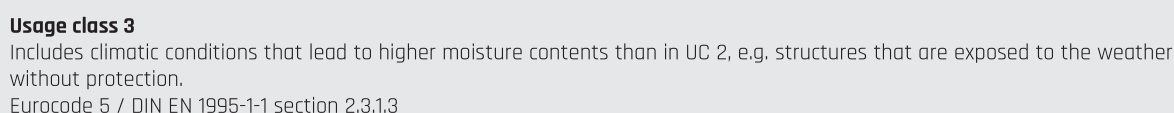
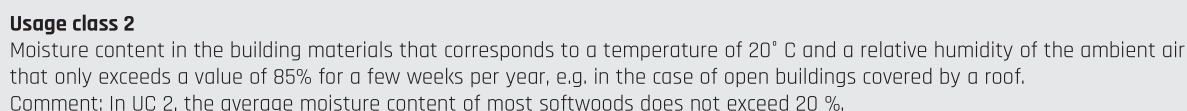
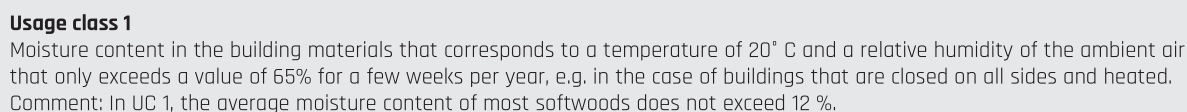
# ANGLE BRACKETS

## ASSORTMENT

						Height [mm]	Length [mm]	Width [mm]	Basics Statik & Diagramme from page	Products & Statik from page	Products Made of V4A from page
ANGLE BRACKET TOP 80/120						80-120	60	55	110	120	
ANGLE BRACKET 70X70X2.0					 	70	70	55	110	122	293
ANGLE BRACKET 70X70 GREENLINE						70	70	55	110	122	
ANGLE BRACKET TOP KR90E						95	85	65	110	124	
ANGLE BRACKET 90X90X2.5					 	90	90	65	110	128	293
ANGLE BRACKET 90X90 GREENLINE						90	90	65	110	126	
ANGLE BRACKET 100X100X3.0					 	100	100	90	110	130	293
ANGLE BRACKET 100X100 GREENLINE						105	105	90	110	130	
STRUT CONNECTOR 135 DEGREES						90-100	90-100	65-90		132	
ANGLE BRACKET TYPE 110/170L						170	110	95	110	132	
ANGLE BRACKET KR 3 MM						95-285	88	65	110	134	
ANGLE BRACKET KR 4 MM						95-285	88	65	110	134	
ANGLE BRACKET TYPE 50/80						90	50	50-80	110	138	
ANGLE BRACKET TYPE 110						90	50	110	110	138	
ANGLE BRACKET TYPE 55/80						80	60	55	110	140	
ANGLE BRACKET TYPE 60/100						100	60	60	110	140	
CONSOLE ANGLE						120-200	54	60	110	142	
ANGLE BRACKET TYPE 40/45						50-90	50-90	40-45	110	144	
ANGLE BRACKET TYPE 40/90					 	90	90	40	110	146	294
ANGLE BRACKET TYPE 40/120						120	95	40	110	146	
ANGLE BRACKET TYPE 692						65	65	90	110	146	

## ASSORTMENT

	CE symbol
	Steel with indication of the steel quality and galvanisation
	Stainless steel with material number
	Timber/timber connection
	Timber/concrete-connection



# ANGLE BRACKETS

## APPLICATIONS

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### Application:

Timber/timber; timber/concrete, steel connections

### Materials:

350  
GD  
Z275

250  
GD  
Z275

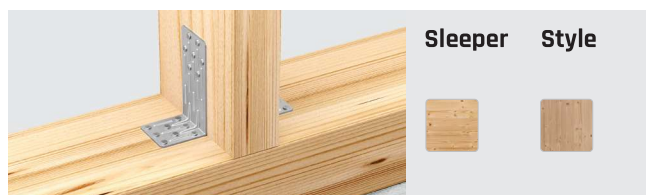
235  
JR  
feuerverzinkt

A4  
1.4571

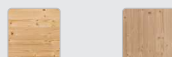
### Material thicknesses:

1.5 / 2.0 / 2.5 / 3.0 / 4.0 / 6.0 / 8.0 mm

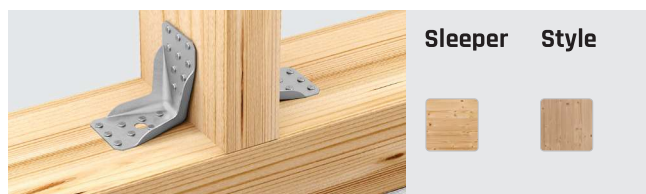
More on request.



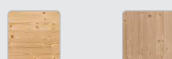
Sleeper Style



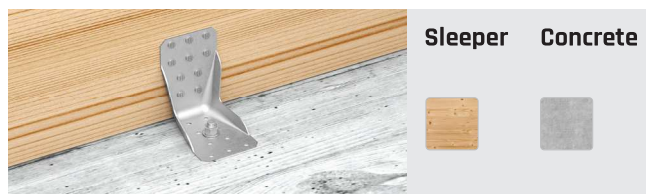
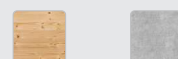
Cross



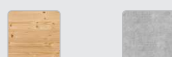
Sleeper Style



Sleeper Concrete



Sleeper Concrete



BSH Concrete



### For use in usage classes



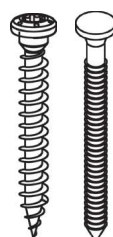
NKL 1



NKL 2



NKL 3



### Connecting element:

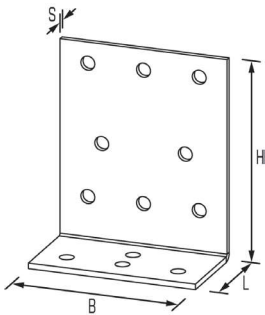
GH threaded nails 4.0 x 35 / 40 / 50 / 60 / 75 / 100 mm



GH screws 5.0 x 25 / 35 / 40 / 50 / 60 / 70 mm

Bolt, dowel or concrete anchor M10, M12

Connecting elements from page 274

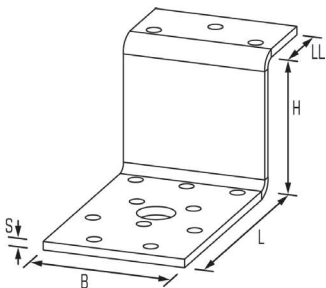
# ENTRANCE DOOR BRACKETS





Art. No.	Dimensions [mm]							nN	EAN	Weight	Pallet	PU		
	H	x	L	x	W(B)	x	T(S)							
20000022	70	x	30	x	60	x	2,0	12	110409	0.090 kg	7000	100	■	■

Entrance door brackets are brackets for universal use for timber/timber fastening.

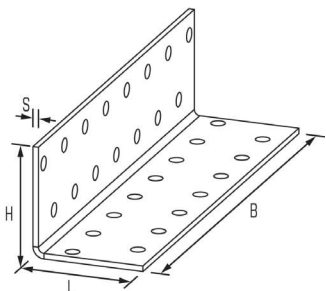
# Z-CONNECTOR





Art. No.	Dimensions [mm]									nN	nBo	EAN	Weight	Pallet	PU		
	H	x	L	x	LL	x	W(B)	x	T(S)	Ø 5	Ø 13	4019346	kg				
34	40	x	75	x	50	x	30	x	3,0	13	1,00	190005	0.165	3400	100	■	■
35	50	x	75	x	50	x	30	x	3,0	13	1,00	190012	0.175	3400	100	■	■
36	60	x	75	x	50	x	30	x	3,0	13	1,00	190029	0.185	3400	100	■	■

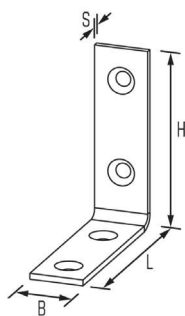
Z-connectors are used, for example, to fasten OSB or corrugated beams to laminated timber beams.

# CORNER ANGLE BRACKETS



Art. No.	Dimensions [mm]							nN	EAN	Weight	Pallet	PU		
	H	x	L	x	W(B)	x	T(S)	Ø 5	4019346	kg				
11541	40	x	40	x	100	x	2,0	20	110447	0.120	3500	50	■	
11542	40	x	40	x	150	x	2,0	30	110454	0.185	3000	50	■	
11543	40	x	40	x	200	x	2,0	40	110461	0.235	3000	50	■	
11544	40	x	40	x	250	x	2,0	50	110478	0.295	2400	50	■	

Corner angle brackets are for fixing timber/timber connections.

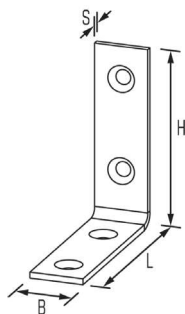


# CHAIR BRACKETS

3

Art. No.	Dimensions [mm]							nN	EAN	Weight	Pallet	PU		
	H	x	L	x	W(B)	x	T(S)							
10541	25	x	25	x	15	x	2,0	4,0	122013	0.010	60000	100	■	
10529	30	x	30	x	15	x	2,0	4,0	122020	0.012	40000	100	■	
10530	40	x	40	x	15	x	2,0	4,0	122037	0.016	40000	100	■	
10531	50	x	50	x	15	x	2,0	4,0	122044	0.021	30000	100	■	
10542	60	x	60	x	20	x	2,0	4,0	122051	0.033	10000	100	■	
10545	80	x	80	x	20	x	2,0	4,0	122068	0.044	10000	50	■	
10546	100	x	100	x	20	x	2,0	6,0	122075	0.055	10000	50	■	
10547	120	x	120	x	20	x	2,0	6,0	122082	0.066	7500	20	■	

Chair brackets are ideal for light timber constructions and for furniture connections.



# ANGLE BRACKETS

## 3-5.0 THICK

Art. No.	Dimensions [mm]							nN	EAN	Weight	Pallet	PU		
	H	x	L	x	W(B)	x	T(S)							
10550	40	x	40	x	20	x	3,0	4	166406	0.033	480	10	■	
10551	60	x	60	x	20	x	3,0	4	166413	0.049	480	20	■	
10535	80	x	80	x	20	x	5,0	4	110546	0.110	1400	20	■	
10536	100	x	100	x	20	x	5,0	4	110553	0.137	1400	20	■	
10537	120	x	120	x	20	x	5,0	4	110560	0.165	1400	20	■	
10538	140	x	140	x	20	x	5,0	4	110577	0.192	1080	20	■	
10539	160	x	160	x	20	x	5,0	4	110584	0.220	1200	20	■	
10540	180	x	180	x	20	x	5,0	4	110591	0.247	1200	20	■	

Thick brackets are used for lightweight timber construction and furniture building.