

R.01 - ROOF & CEILING

KIT STRUCTURE SYSTEMS SERIES DATA SHEETS

V>SELF 40 Series

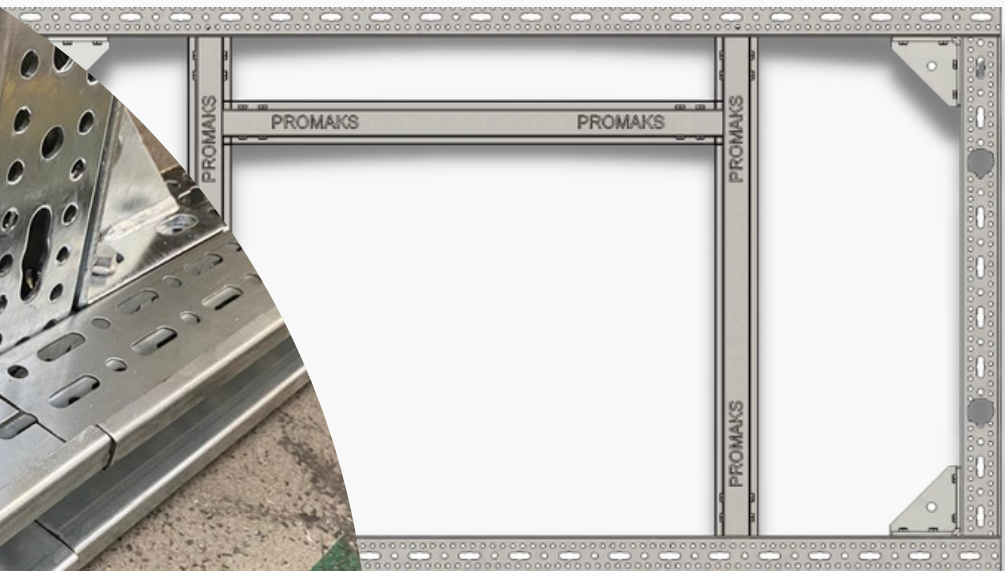
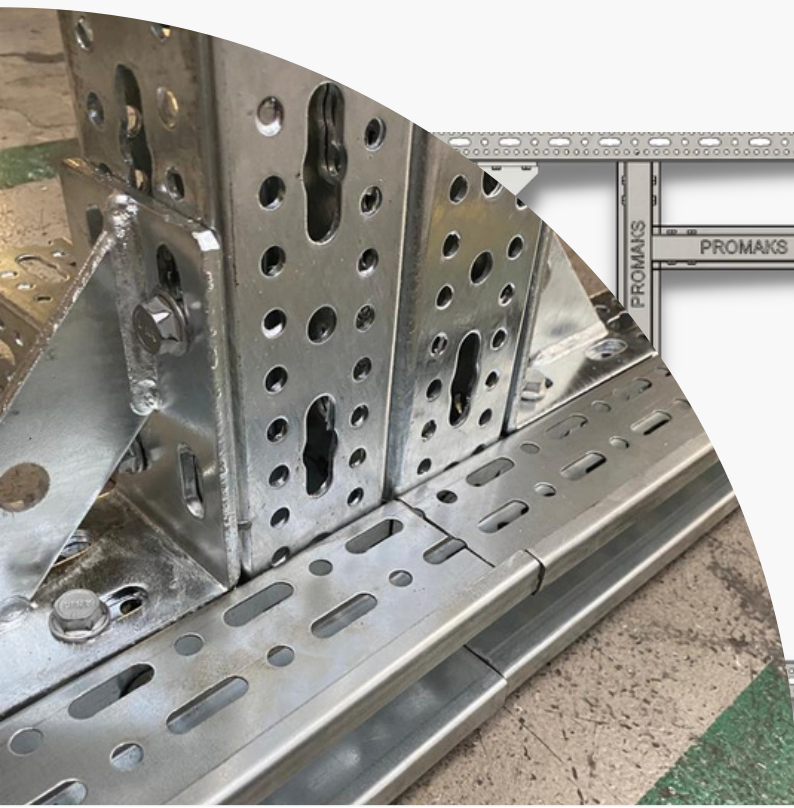
V>EASY 50 Series

V>CORE 80 Series

V>LINE 100 Series

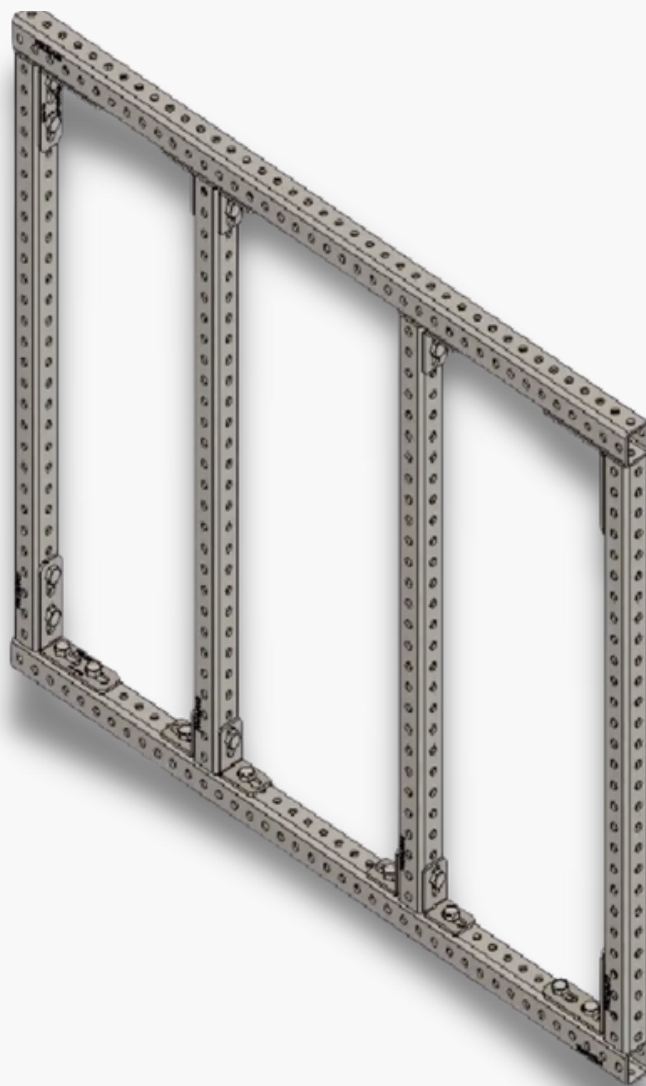
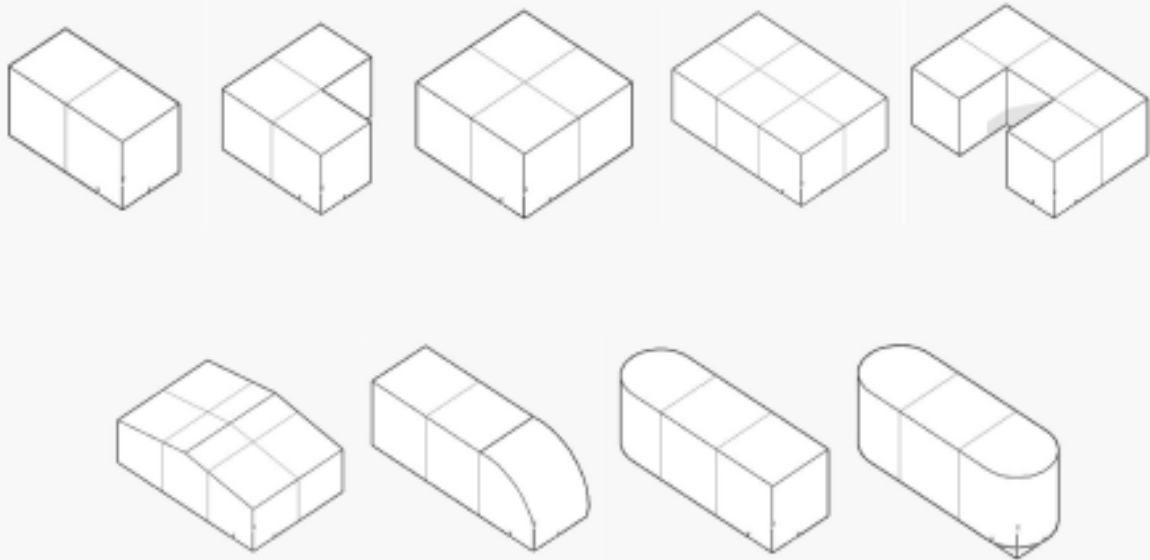
V>KING 120 Series

V>GIANT 150 Series

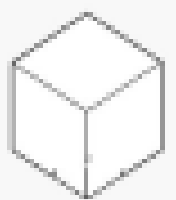
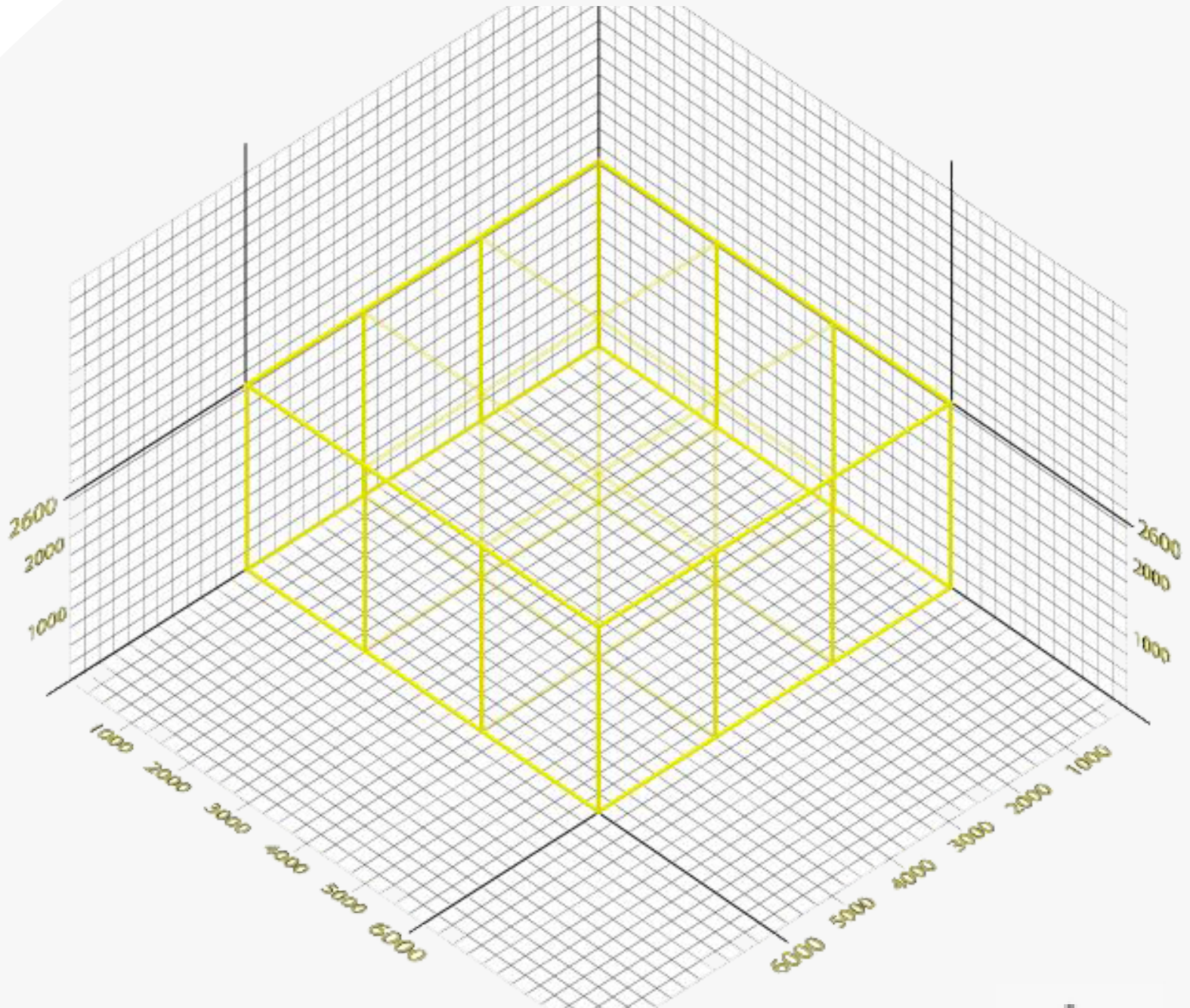


VSELF 40 Series

design as you like...



V>SELF 40 Series

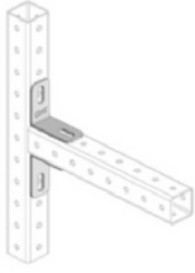


Base Module : 2.0 x 2.0 x 2.6 m

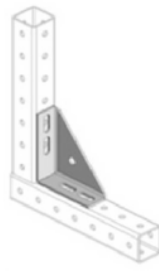
Smart Connection



PMKS-KD-450
Promega Connection



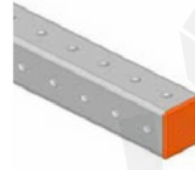
PMKS-KD-451
Promega Connection



PMKS-KD-452
Promega Connection



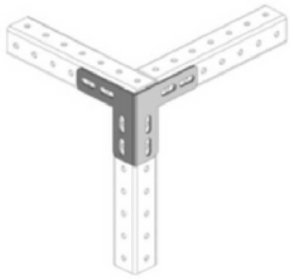
PMKS-MFS-040/050
Promega Connection



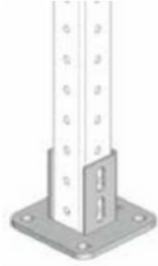
PMKS-PC-050
Promega Connection



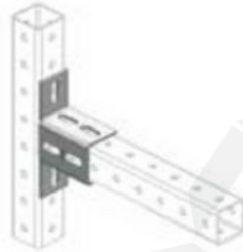
PMKS-TTA-040/050
Promega Connection



PMKS-TDE-040/050
Promega Connection



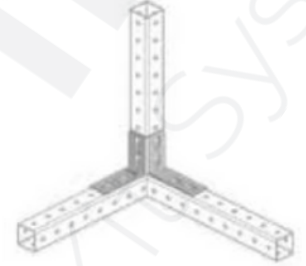
PMKS-TTA-041/051
Promega Connection



PMKS-TTY-040/050
Promega Connection



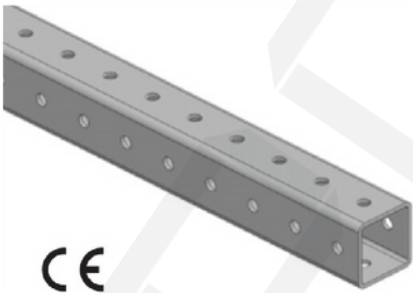
PMKS-TTY-041/051
Promega Connection



PMKS-TTY-042/052
Promega Connection

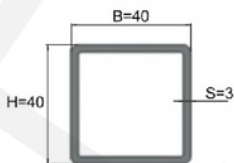
ProMAKS Profile

PMKS-PRF-040-001



25mm
Ø 9,5

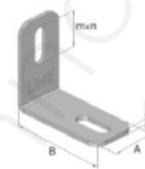
Delik arası mesafe: 25 mm
Delik çapı: 9,5 mm
Distance between holes: 25 mm
Hole diameter: 9,5 mm



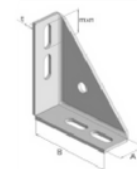
Connection Pieces



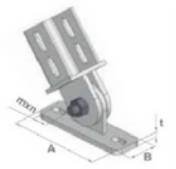
PMKS-KD-450



PMKS-KD-451



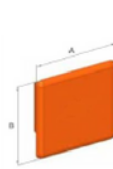
PMKS-KD-452



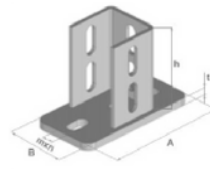
PMKS-MFS-040/050



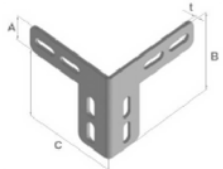
PMKS-KOD-100-001



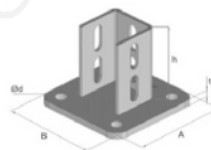
PMKS-PC-050



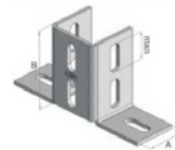
PMKS-TTA-040/050



PMKS-TDE-040/050



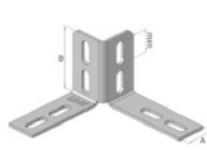
PMKS-TTA-041/051



PMKS-TTY-040/050

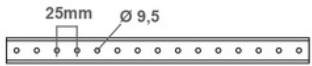
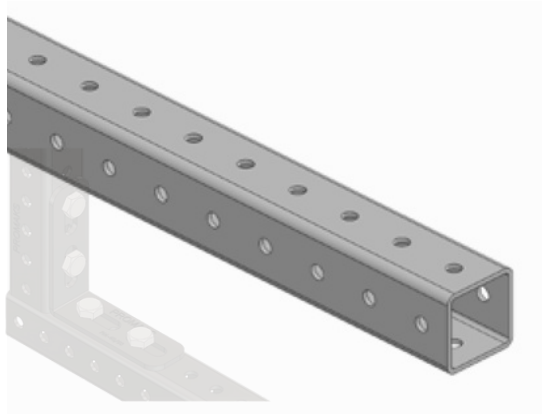


PMKS-TTY-041/051

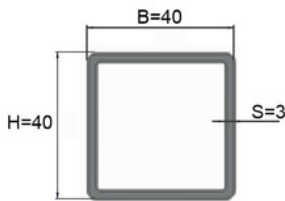


PMKS-TTY-042/052

Medium Duty V-SELF Series Structural Systems

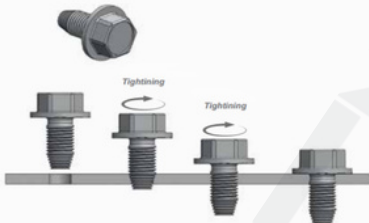


Distance between holes: 25 mm
Hole diameter: 9,5 mm



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and medium load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized 92µm minimum Hot-dip of galvanize.

Section Properties

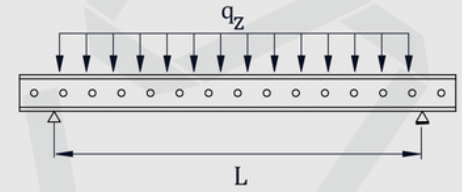
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modules (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia (cm ⁴) | | Section Modules (cm ³) | |
|--------------|----|---|---------------------|--|---|---|---|----------------|---------------------------------------|----------------|
| H | B | S | | | | | I _y | I _z | W _y | W _z |
| 40 | 40 | 3 | 3,10 | 309,00 | 8,13 | 14,77 | 7,38 | 7,38 | 3,69 | 3,69 |

The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | q _z , perm kN/m | F _z , (q _z ,perm *L) kN |
|--------------|-------------------------------|--|
| 500 | 20,00 | 10,00 |
| 1000 | 4,15 | 4,15 |
| 1500 | 1,20 | 1,80 |
| 2000 | 0,50 | 1,00 |
| 2500 | 0,25 | 0,63 |

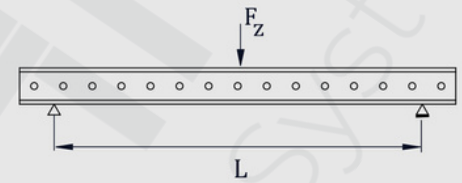
q_z[kN/m] as permanent load at L



Point load

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 500 | 4,80 |
| 1000 | 2,40 |
| 1500 | 1,15 |
| 2000 | 0,63 |
| 2500 | 0,37 |

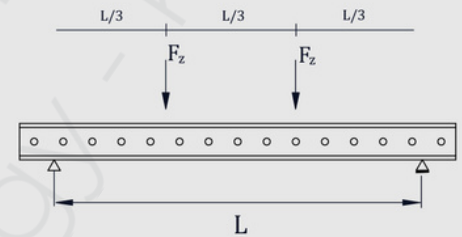
F_z[kN] as permanent load at L/2



2 Point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 500 | 3,70 |
| 1000 | 1,50 |
| 1500 | 0,65 |
| 2000 | 0,36 |
| 2500 | 0,22 |

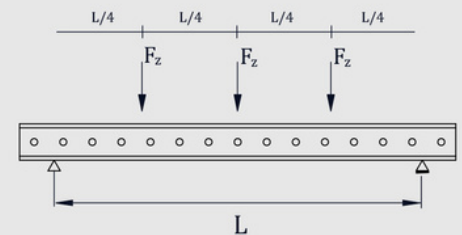
F_z[kN] as permanent load at L/2 and 2*L/3



3 Point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 500 | 2,5 |
| 1000 | 1,10 |
| 1500 | 0,48 |
| 2000 | 0,26 |
| 2500 | 0,16 |

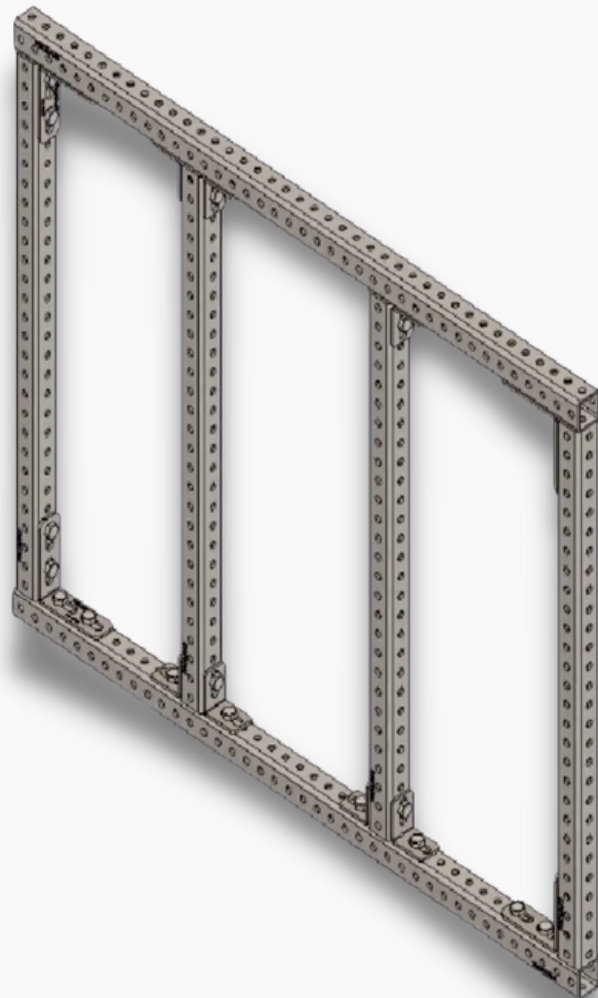
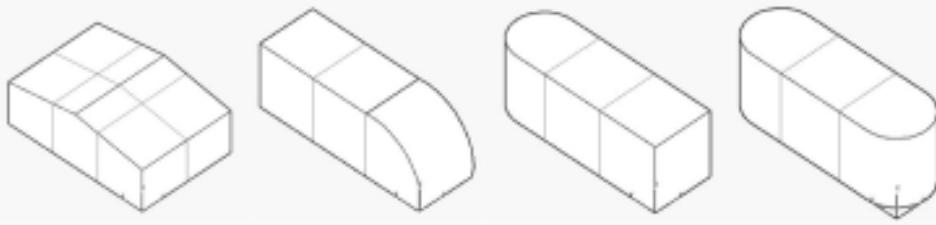
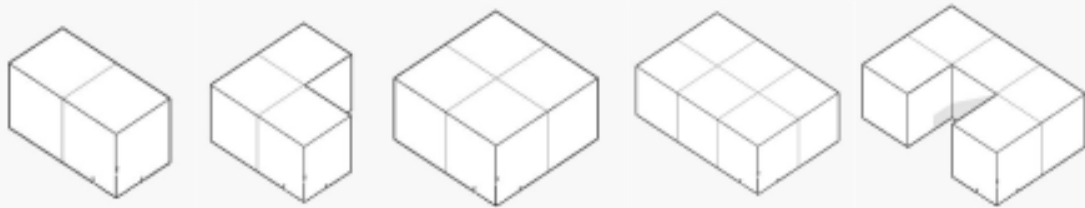
F_z[kN] as permanent load at L/4, L/2 and 3*L/4



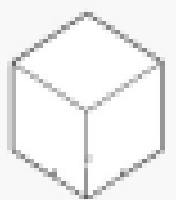
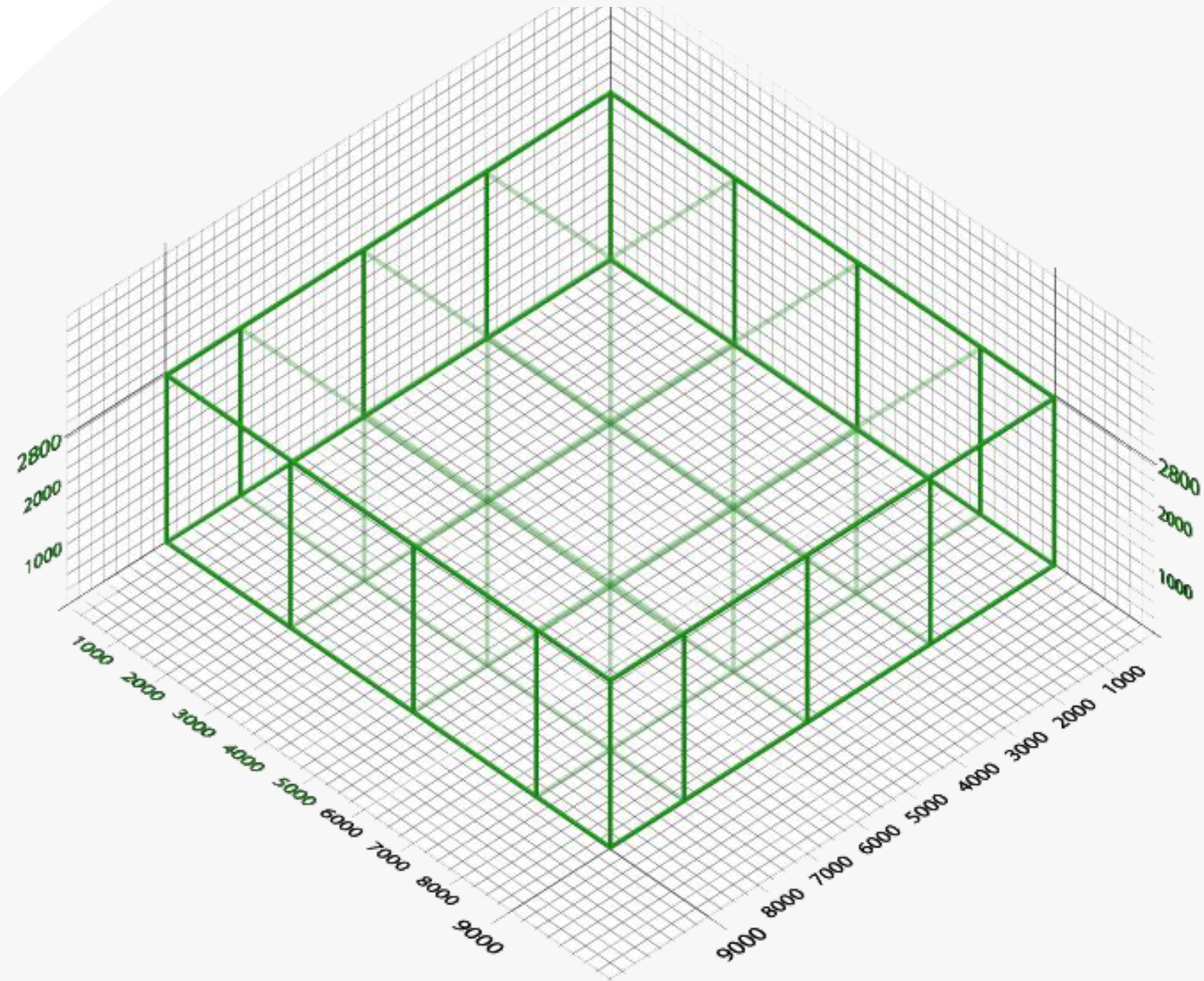
- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

V-EASY 50 Series

design as you like...



V>EASY 50 Series

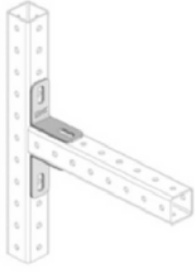


Base Module : 2.5 x 2.5 x 2.8 m

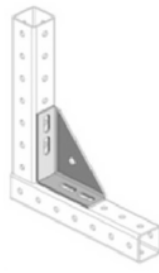
Smart Connection



PMKS-KD-450
Promega Connection



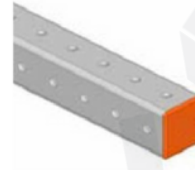
PMKS-KD-451
Promega Connection



PMKS-KD-452
Promega Connection



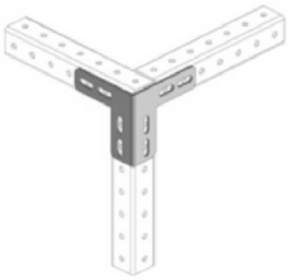
PMKS-MFS-040/050
Promega Connection



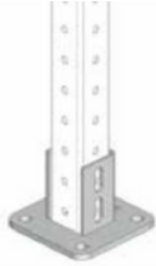
PMKS-PC-050
Promega Connection



PMKS-TTA-040/050
Promega Connection



PMKS-TDE-040/050
Promega Connection



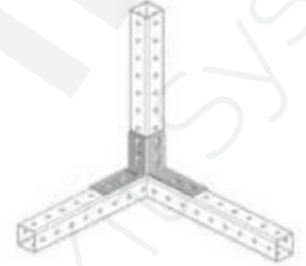
PMKS-TTA-041/051
Promega Connection



PMKS-TTY-040/050
Promega Connection



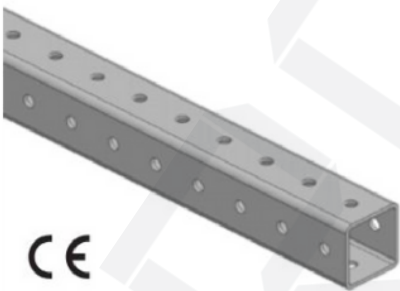
PMKS-TTY-041/051
Promega Connection



PMKS-TTY-042/052
Promega Connection

ProMAKS Profile

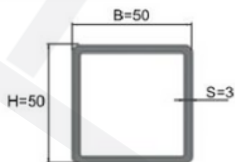
PMKS-PRF-050-001



CE



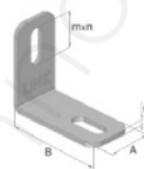
Delik arası mesafe: 25 mm
Delik çapı: 9,5 mm
Distance between holes: 25 mm
Hole diameter: 9,5 mm



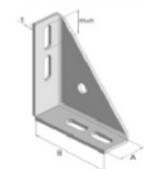
Connection Pieces



PMKS-KD-450



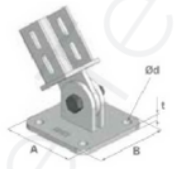
PMKS-KD-451



PMKS-KD-452



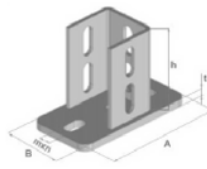
PMKS-MFS-040/050



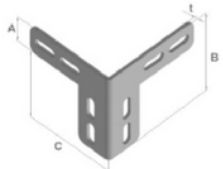
PMKS-KOD-100-001



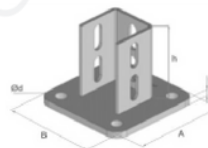
PMKS-PC-050



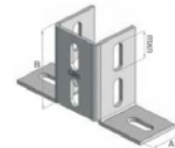
PMKS-TTA-040/050



PMKS-TDE-040/050



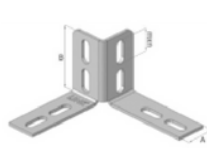
PMKS-TTA-041/051



PMKS-TTY-040/050

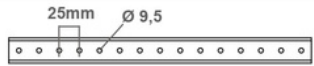
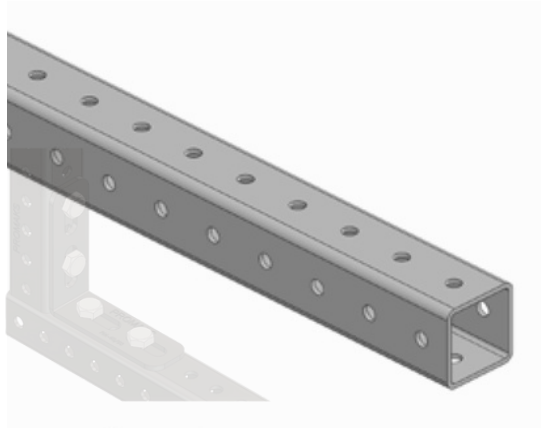


PMKS-TTY-041/051

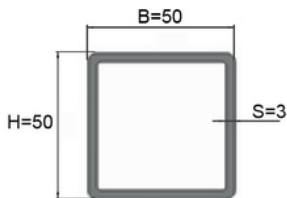


PMKS-TTY-042/052

Medium Duty V-EASY Structural System



Distance between holes: 25 mm
Hole diameter: 9,5 mm



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and medium load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized 92µm minimum
Hot-dip of galvanize.

Section Properties

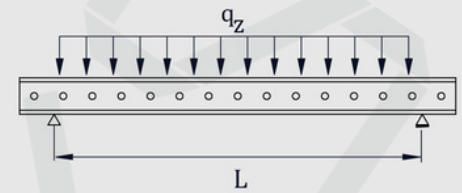
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modules (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia (cm ⁴) | | Section Modules (cm ³) | |
|--------------|----|---|---------------------|--|---|---|---|----------------|---------------------------------------|----------------|
| H | B | S | | | | | I _y | I _z | W _y | W _z |
| 50 | 50 | 3 | 4,00 | 432,00 | 13,19 | 33,07 | 16,53 | 16,53 | 6,61 | 6,61 |

The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | q _z , perm kN/m | F _z , (q _z ,perm *L) kN |
|--------------|-------------------------------|--|
| 1000 | 8,5 | 8,5 |
| 1500 | 2,7 | 4,05 |
| 2000 | 1,1 | 2,2 |
| 2500 | 0,56 | 1,4 |
| 3000 | 0,31 | 0,93 |
| 3500 | 0,19 | 0,665 |

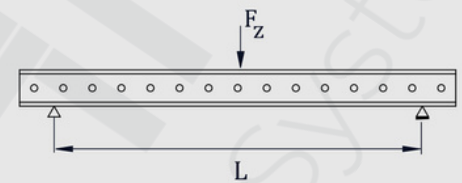
q_z[kN/m] as permanent load at L



Point load

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 4,3 |
| 1500 | 2,6 |
| 2000 | 1,4 |
| 2500 | 0,91 |
| 3000 | 0,61 |
| 3500 | 0,39 |

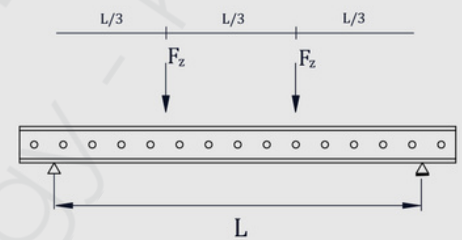
F_z[kN] as permanent load at L/2



2 Point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 3,2 |
| 1500 | 1,5 |
| 2000 | 0,8 |
| 2500 | 0,52 |
| 3000 | 0,34 |
| 3500 | 0,24 |

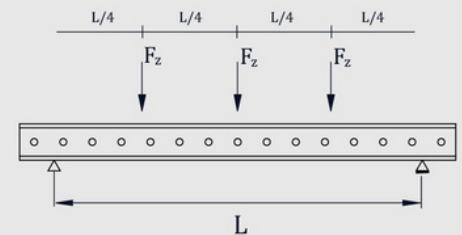
F_z[kN] as permanent load at L/2 and 2*L/3



3 Point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 2,4 |
| 1500 | 1,1 |
| 2000 | 0,6 |
| 2500 | 0,35 |
| 3000 | 0,26 |
| 3500 | 0,17 |

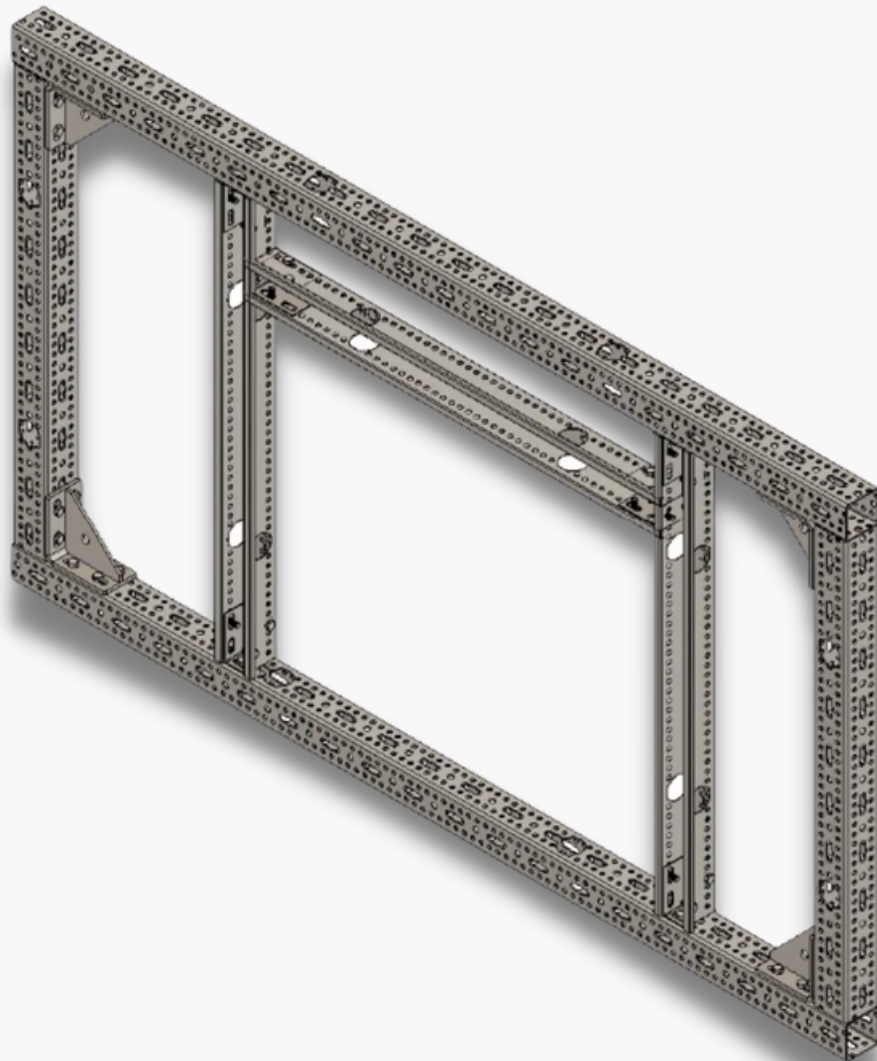
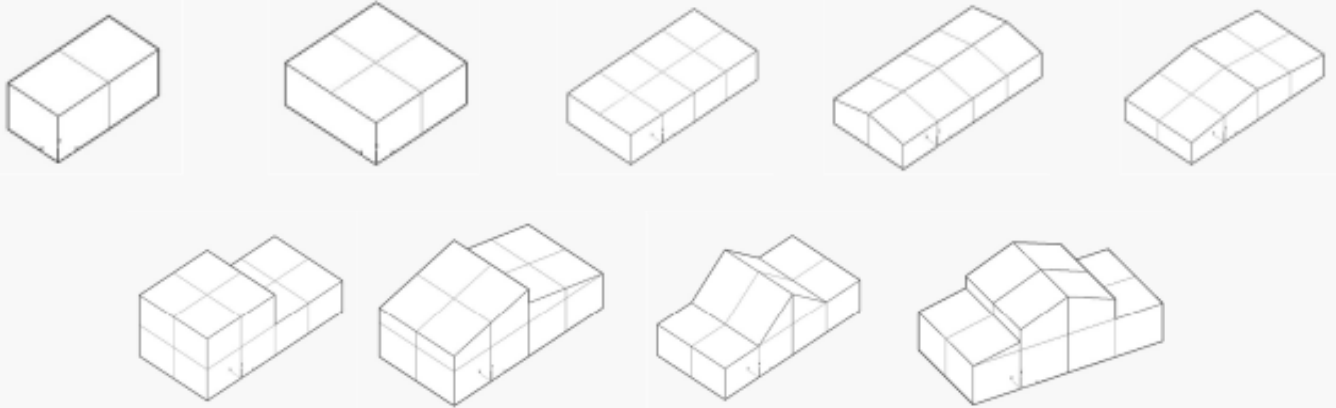
F_z[kN] as permanent load at L/4, L/2 and 3*L/4



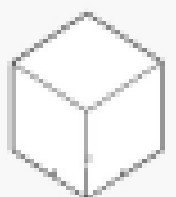
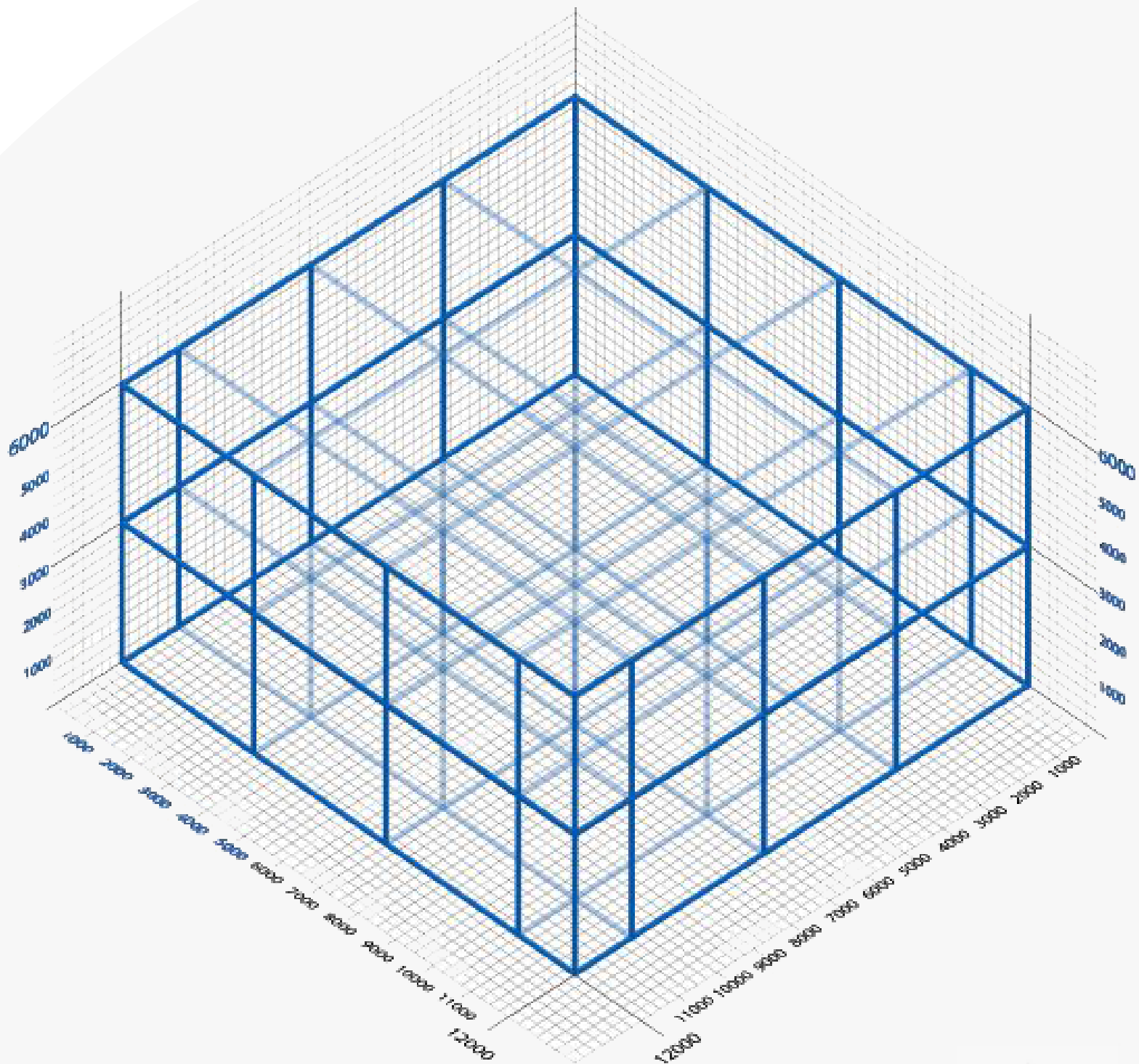
- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

V-CORE 80 Series

design as you like...

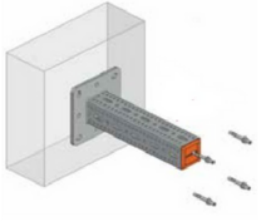


V-CORE 80 Series



Base Module : 3.5 x 3.5 x 3.0 m

Smart Connection



PMKS-HK-080
Promega Connection



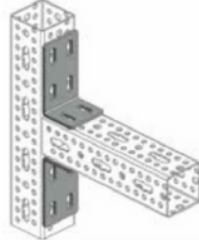
PMKS-KD-080
Promega Connection



PMKS-KD-082
Promega Connection



PMKS-HK-080
-Promega-Promega
Connection



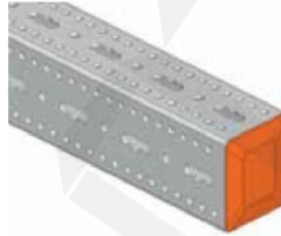
PMKS-KD-081
Promega Connection



PMKS-KD-118
Promega Connection



PMKS-TTA-080
Promega Connection



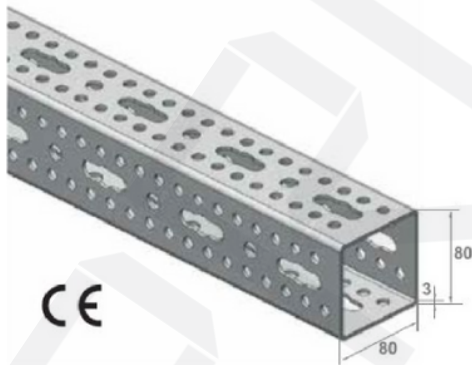
PMKS-PC-080
Promega Connection



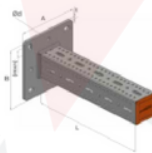
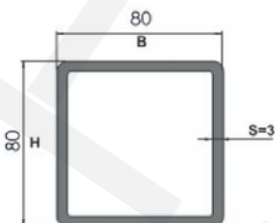
PMKS-MFS-080/081
Promega Connection

ProMAKS Profile

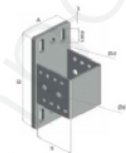
PMKS-PRF-080-001



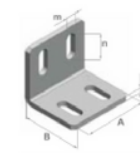
CE



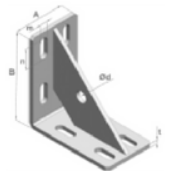
PMKS-HK-080



PMKS-KA-080



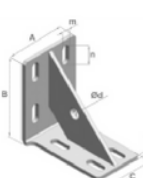
PMKS-KD-080



PMKS-KD-082



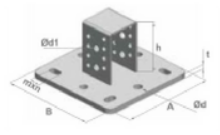
PMKS-KD-081



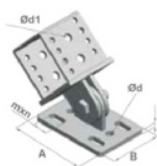
PMKS-KD-118



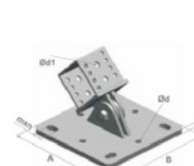
PMKS-PC-080



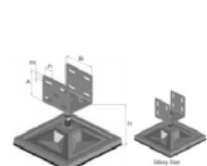
PMKS-TTA-080



PMKS-MFS-080



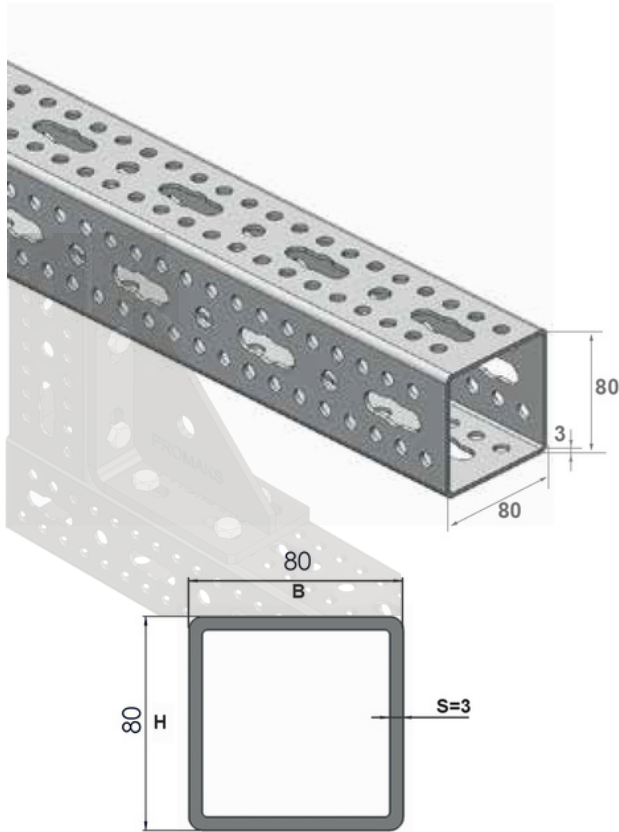
PMKS-MFS-081



PMKS-FOOT-80/81

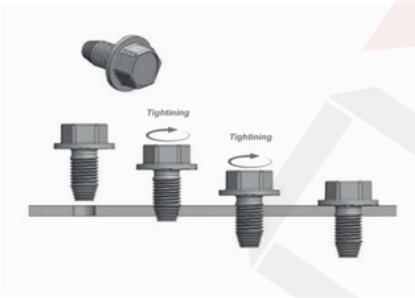
Connection Pieces

Heavy Duty V-CORE Series Structural System



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and high load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized 92µm minimum Hot-dip of galvanize.

Section Properties

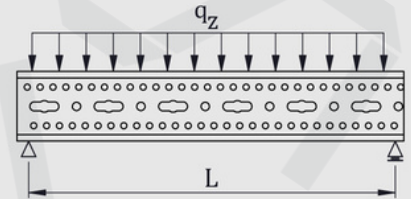
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modulus (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia | | Section Modulus | |
|--------------|------|------|---------------------|---|---|---|--------------------|--------------------|--------------------|--------------------|
| (mm) | (mm) | (mm) | | | | | (cm ⁴) | (cm ⁴) | (cm ³) | (cm ³) |
| H | B | S | | A | Wp | Ip | Iy | Iz | Wy | Wz |
| 80 | 80 | 3 | 5,74 | 510,00 | 35,51 | 108,82 | 54,41 | 54,41 | 13,60 | 13,60 |

■ The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | qz, perm kN/m | Fz, (qz,perm *L) kN |
|--------------|------------------|------------------------|
| 1000 | 18,00 | 18,00 |
| 1500 | 8,00 | 12,00 |
| 2000 | 3,82 | 7,64 |
| 2500 | 1,94 | 4,85 |
| 3000 | 1,10 | 3,30 |
| 3500 | 0,68 | 2,38 |

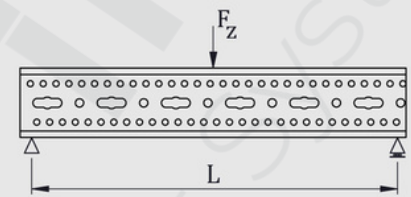
qz[kN/m] as permanent load at L



Point load

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 9,00 |
| 1500 | 6,00 |
| 2000 | 4,44 |
| 2500 | 3,14 |
| 3000 | 2,15 |
| 3500 | 1,54 |

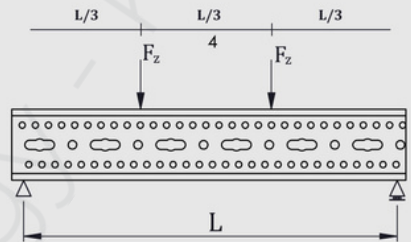
Fz[kN] as permanent load at L/2



2 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 6,83 |
| 1500 | 4,50 |
| 2000 | 2,82 |
| 2500 | 1,80 |
| 3000 | 1,21 |
| 3500 | 0,87 |

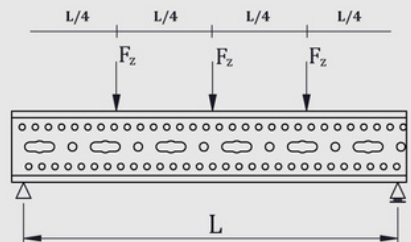
Fz[kN] as permanent load at L/2 and 2*L/3



3 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 4,50 |
| 1500 | 3,00 |
| 2000 | 2,00 |
| 2500 | 1,20 |
| 3000 | 0,87 |
| 3500 | 0,60 |

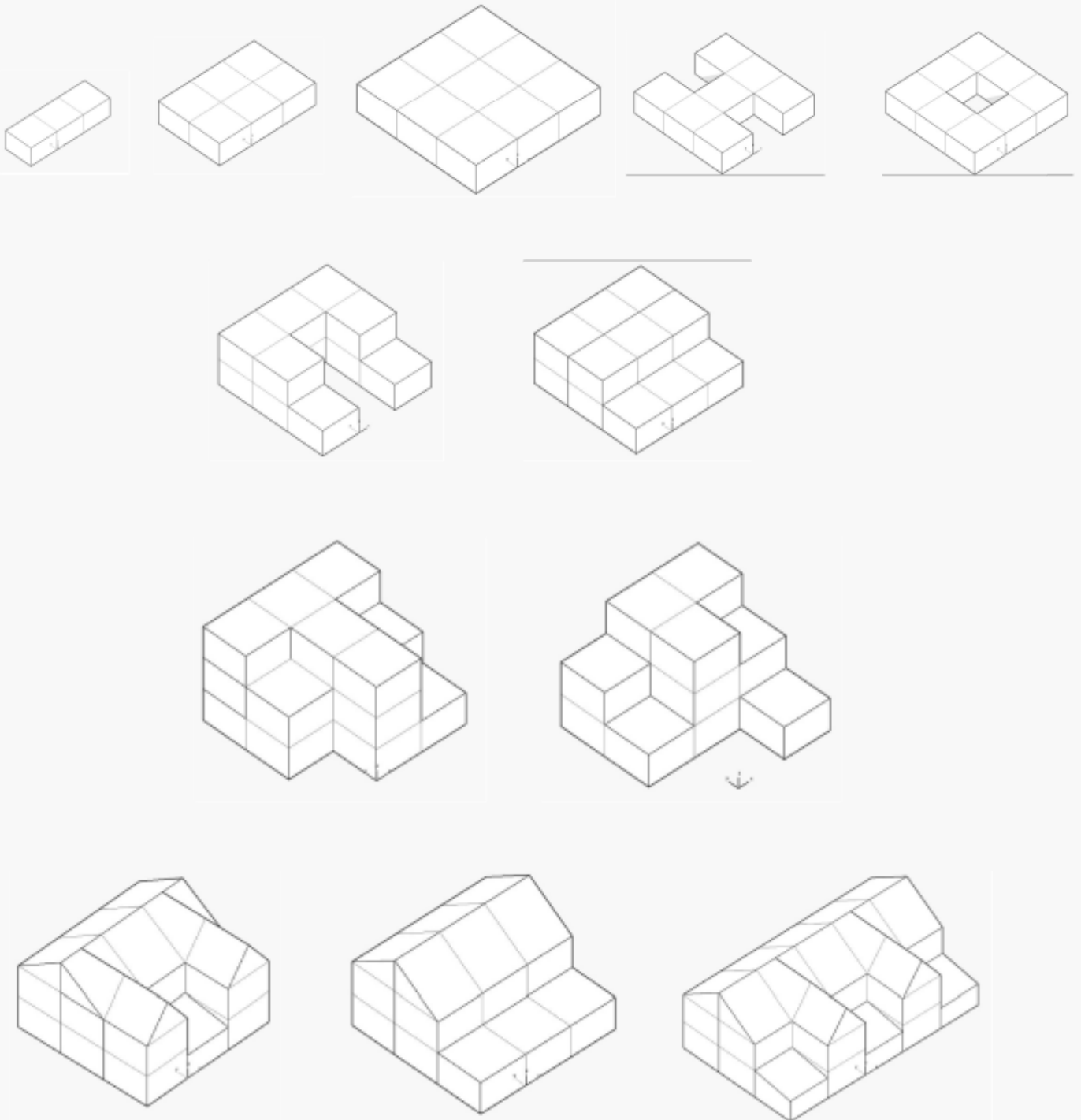
Fz[kN] as permanent load at L/4, L/2 and 3*L/4



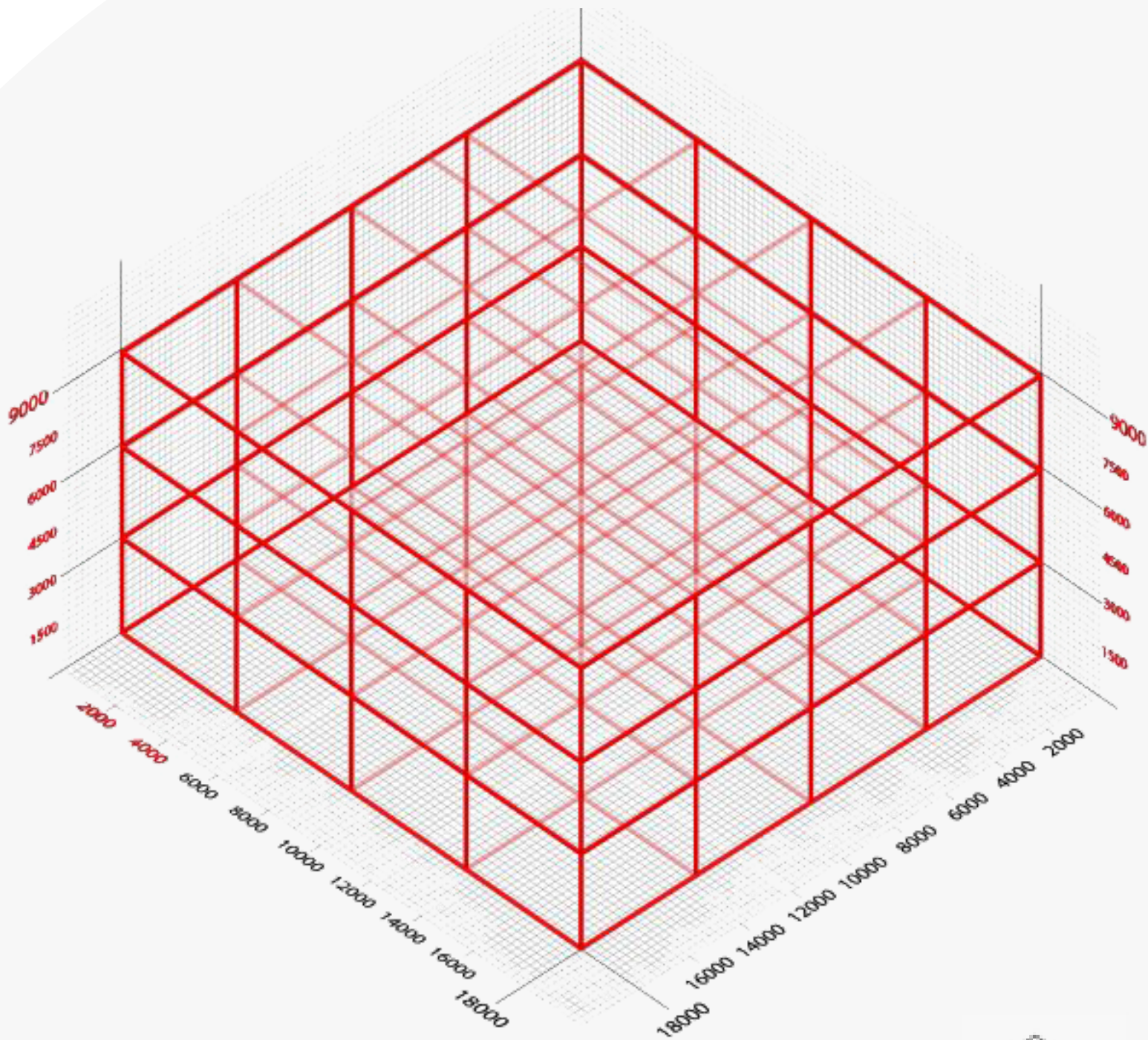
- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

V>LINE 100 Series

design as you like...

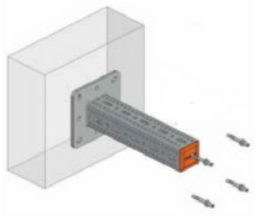


VLINE 100 Series



Base Module : 4.5 x 4.5 x 3.0 m

Smart Connection



PMKS-HK-100
Promega Connection



PMKS-KD-120
Promega Connection



PMKS-KD-101
Promega Connection



PMKS-HK-100
-Promega-Promega
Connection



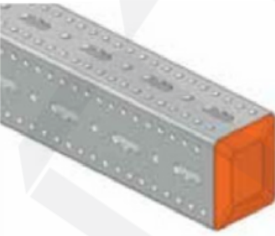
PMKS-KD-121
Promega Connection



PMKS-foot-100/101
Promega Connection



PMKS-TTA-100
Promega Connection



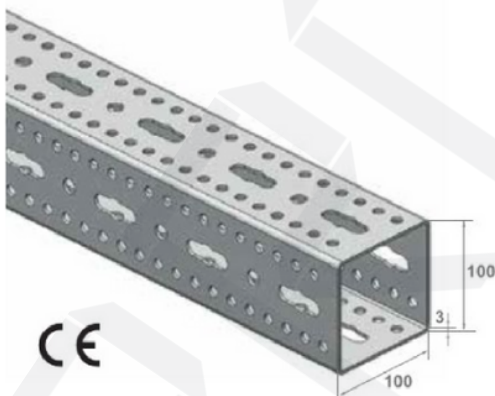
PMKS-PC-100
Promega Connection



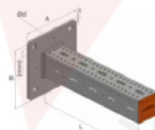
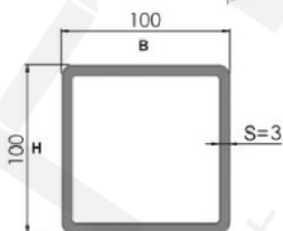
PMKS-MFS-100/101
Promega Connection

ProMAKS Profile

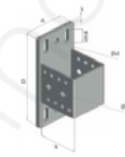
PMKS-PRF-100-001



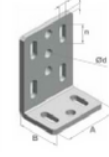
CE



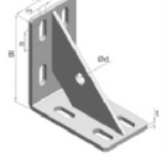
PMKS-HK-100



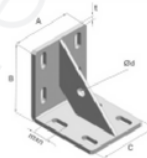
PMKS-KA-100



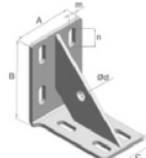
PMKS-KD-100



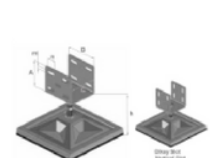
PMKS-KD-101



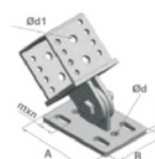
PMKS-KD-120



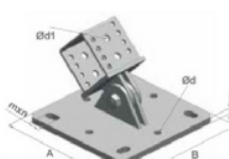
PMKS-KD-121



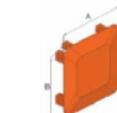
PMKS-FOOT-100/101



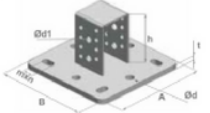
PMKS-MFS-100



PMKS-MFS-101



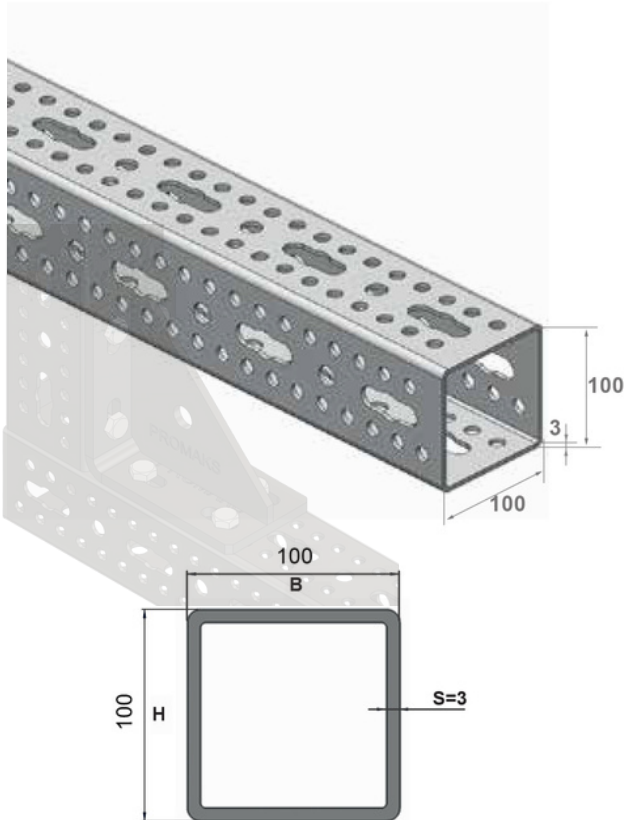
PMKS-PC-100



PMKS-TTA-100

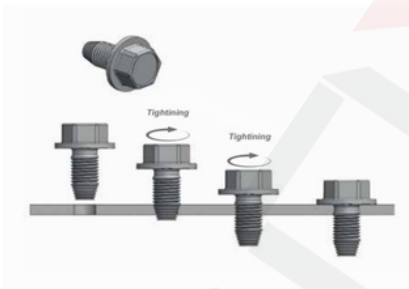
Connection Pieces

Heavy Duty V-LINE Series Structural System



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and high load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized
92µm minimum Hot-dip of galvanize.

Section Properties

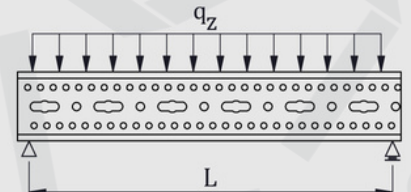
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modulus (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia (cm ⁴) | | Section Modulus (cm ³) | |
|--------------|-----|---|---------------------|--|---|---|---|----------------|---------------------------------------|----------------|
| H | B | S | | | | | I _y | I _z | W _y | W _z |
| 100 | 100 | 3 | 7,3 | 750,00 | 56,39 | 242,23 | 121,12 | 121,12 | 24,22 | 24,22 |

The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | qz, perm kN/m | Fz,(qz,perm *L) kN |
|--------------|------------------|-----------------------|
| 1000 | 32,00 | 32,00 |
| 2000 | 8,00 | 16,00 |
| 3000 | 2,51 | 7,53 |
| 4000 | 1,03 | 4,12 |
| 5000 | 0,50 | 2,50 |
| 6000 | 0,26 | 1,56 |

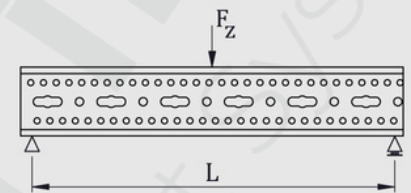
qz[kN/m] as permanent load at L



Point load

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 16,00 |
| 2000 | 7,90 |
| 3000 | 4,70 |
| 4000 | 2,50 |
| 5000 | 1,50 |
| 6000 | 0,99 |

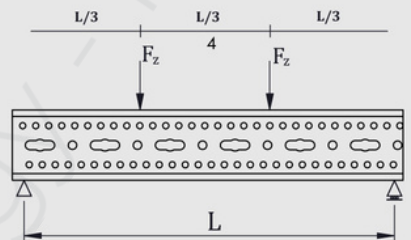
Fz[kN] as permanent load at L/2



2 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 12,00 |
| 2000 | 5,90 |
| 3000 | 2,71 |
| 4000 | 1,52 |
| 5000 | 0,91 |
| 6000 | 0,58 |

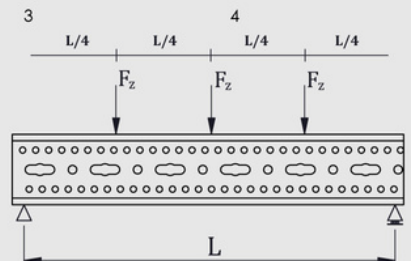
Fz[kN] as permanent load at L/2 and 2*L/3



3 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 8,00 |
| 2000 | 3,90 |
| 3000 | 1,96 |
| 4000 | 1,10 |
| 5000 | 0,65 |
| 6000 | 0,40 |

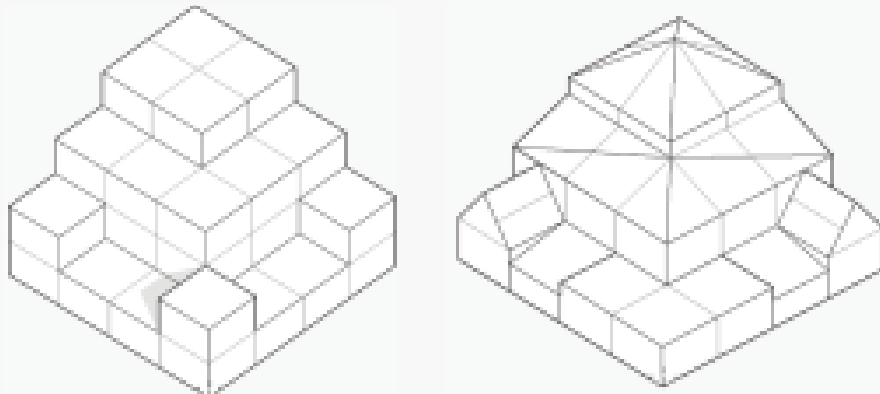
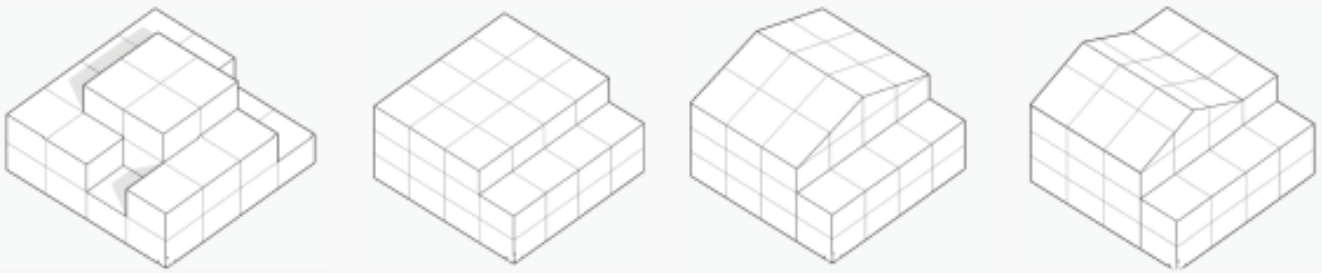
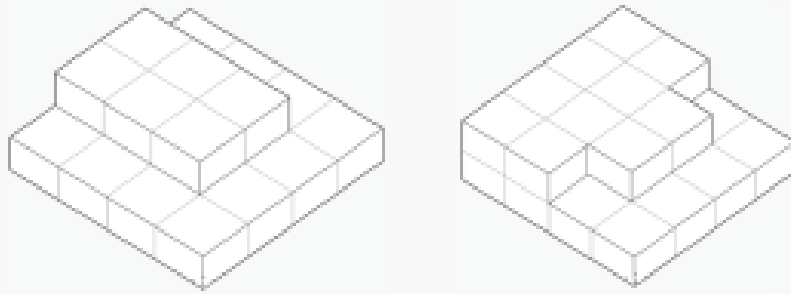
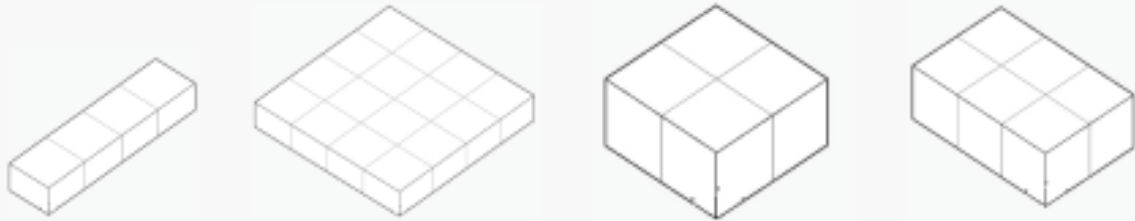
Fz[kN] as permanent load at L/4, L/2 and 3*L/4



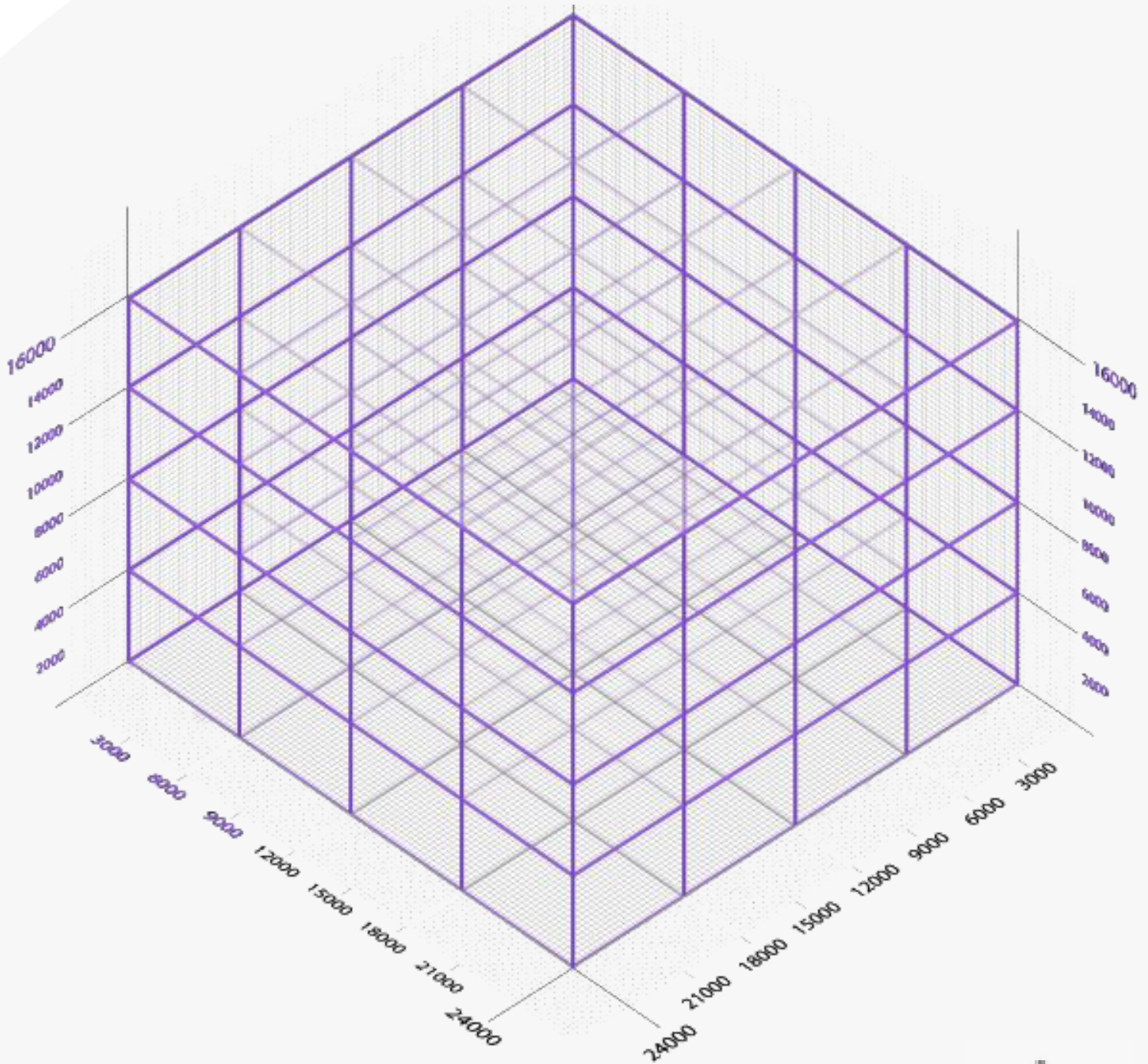
- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

V-KING 120 Series

design as you like...

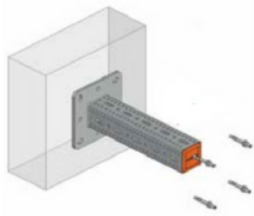


V-KING 120 Series



Base Module : 6.0 x 6.0 x 4.0 m

Smart Connection



PMKS-HK-120
Promega Connection



PMKS-KD-120
Promega Connection



PMKS-KD-101
Promega Connection



PMKS-HK-120
-Promega-Promega
Connection



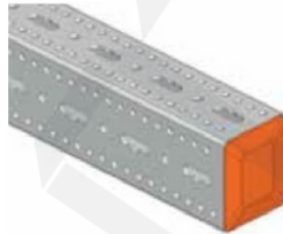
PMKS-KD-121
Promega Connection



PMKS-foot-120/121
Promega Connection



PMKS-TTA-120
Promega Connection



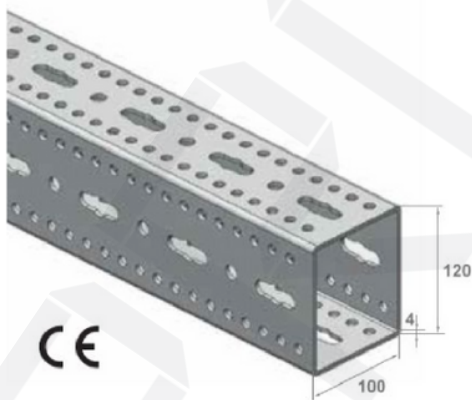
PMKS-PC-120
Promega Connection



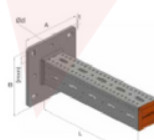
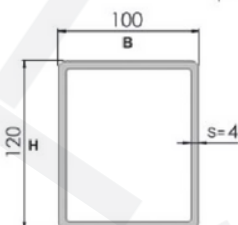
PMKS-MFS-120/121
Promega Connection

ProMAKS Profile

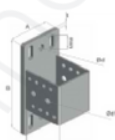
PMKS-PRF-120-001



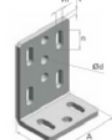
CE



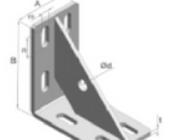
PMKS-HK-120



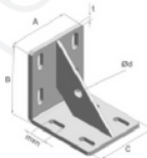
PMKS-KA-120



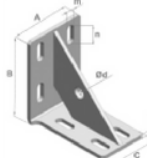
PMKS-KD-100



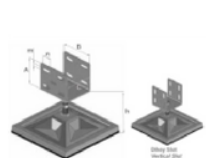
PMKS-KD-101



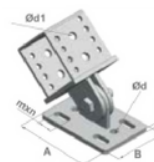
PMKS-KD-120



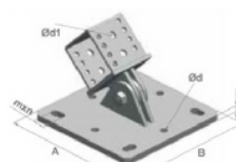
PMKS-KD-121



PMKS-FOOT-120/121



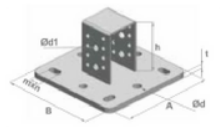
PMKS-MFS-120



PMKS-MFS-121



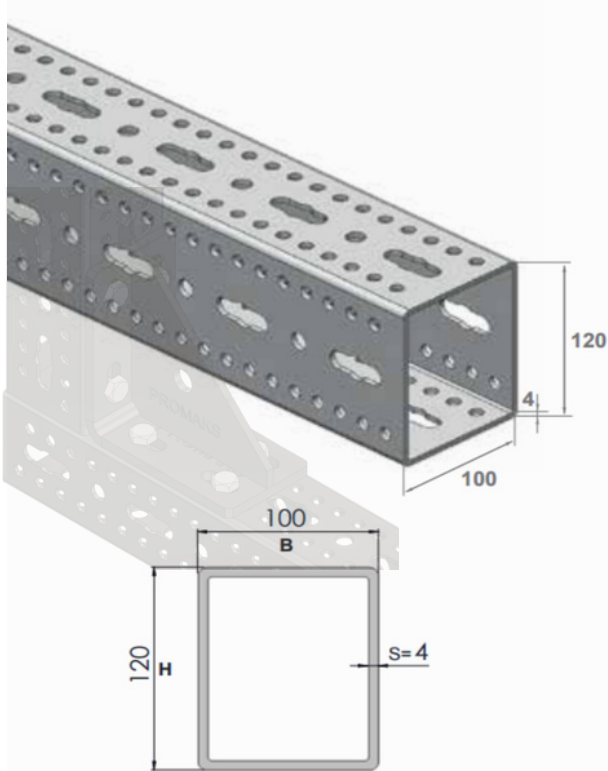
PMKS-PC-120



PMKS-TTA-120

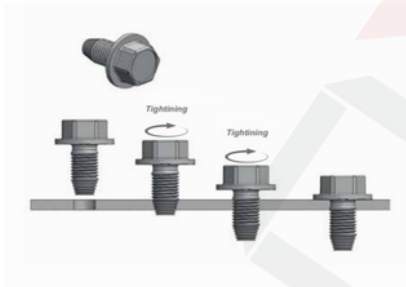
Connection Pieces

Heavy Duty V-KING Series Structural System



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and high load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized
92µm minimum Hot-dip of galvanize.

Section Properties

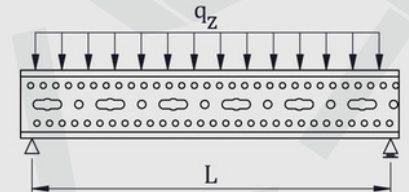
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modules (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia | | Section Modules | |
|--------------|-----|---|---------------------|---|---|---|-------------------|--------|-----------------|-------|
| H | B | S | | | | | ly | lz | Wy | Wz |
| 120 | 100 | 4 | 11 | 1147,00 | 89,02 | 435,10 | 241,92 | 193,18 | 40,32 | 38,64 |

■ The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | qz, perm kN/m | Fz,(qz,perm *L) kN |
|--------------|------------------|-----------------------|
| 1000 | 53,00 | 53,00 |
| 2000 | 13,30 | 26,60 |
| 3000 | 4,70 | 14,10 |
| 4000 | 2,00 | 8,00 |
| 5000 | 0,95 | 4,75 |
| 6000 | 0,54 | 3,24 |

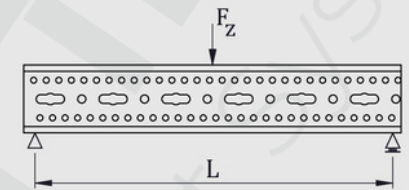
qz[kN/m] as permanent load at L



Point load

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 26,00 |
| 2000 | 13,30 |
| 3000 | 8,08 |
| 4000 | 5,20 |
| 5000 | 3,20 |
| 6000 | 2,10 |

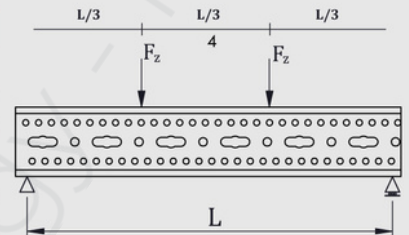
Fz[kN] as permanent load at L/2



2 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 20,00 |
| 2000 | 9,90 |
| 3000 | 5,50 |
| 4000 | 3,00 |
| 5000 | 1,80 |
| 6000 | 1,20 |

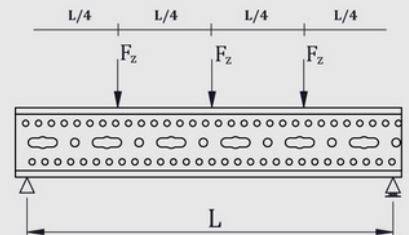
Fz[kN] as permanent load at L/2 and 2*L/3



3 point loads

| Lmax (mm) | Fz, perm kN |
|--------------|----------------|
| 1000 | 13,40 |
| 2000 | 6,60 |
| 3000 | 3,90 |
| 4000 | 2,20 |
| 5000 | 1,30 |
| 6000 | 0,86 |

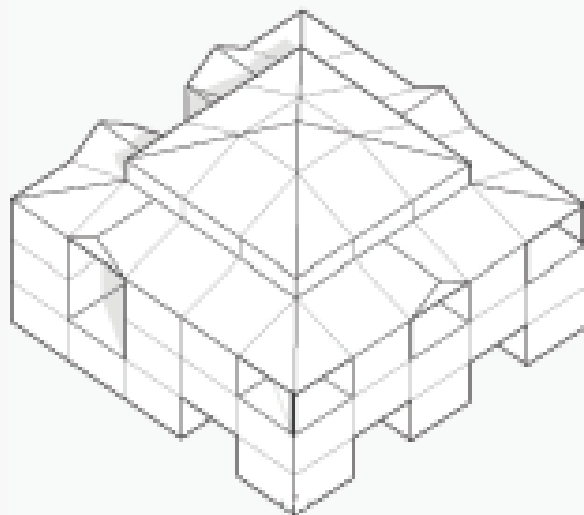
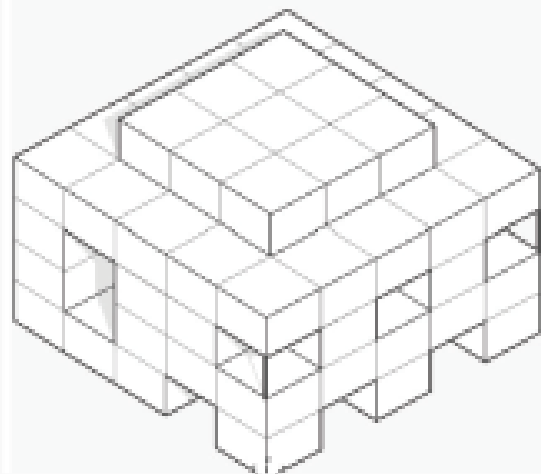
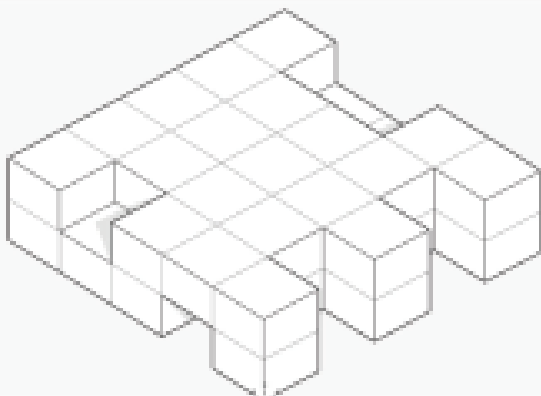
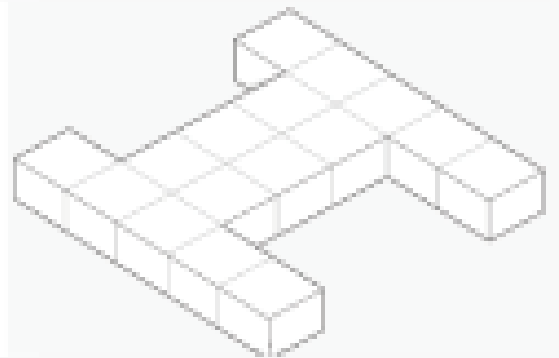
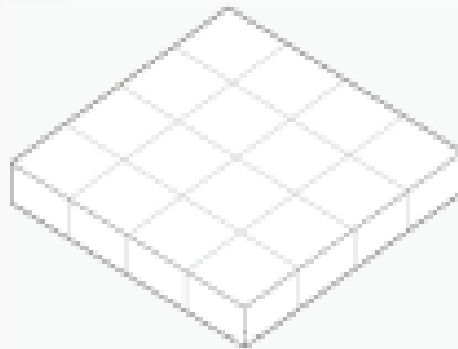
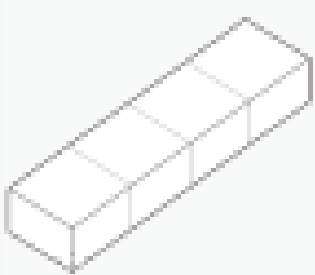
Fz[kN] as permanent load at L/4, L/2 and 3*L/4



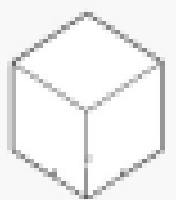
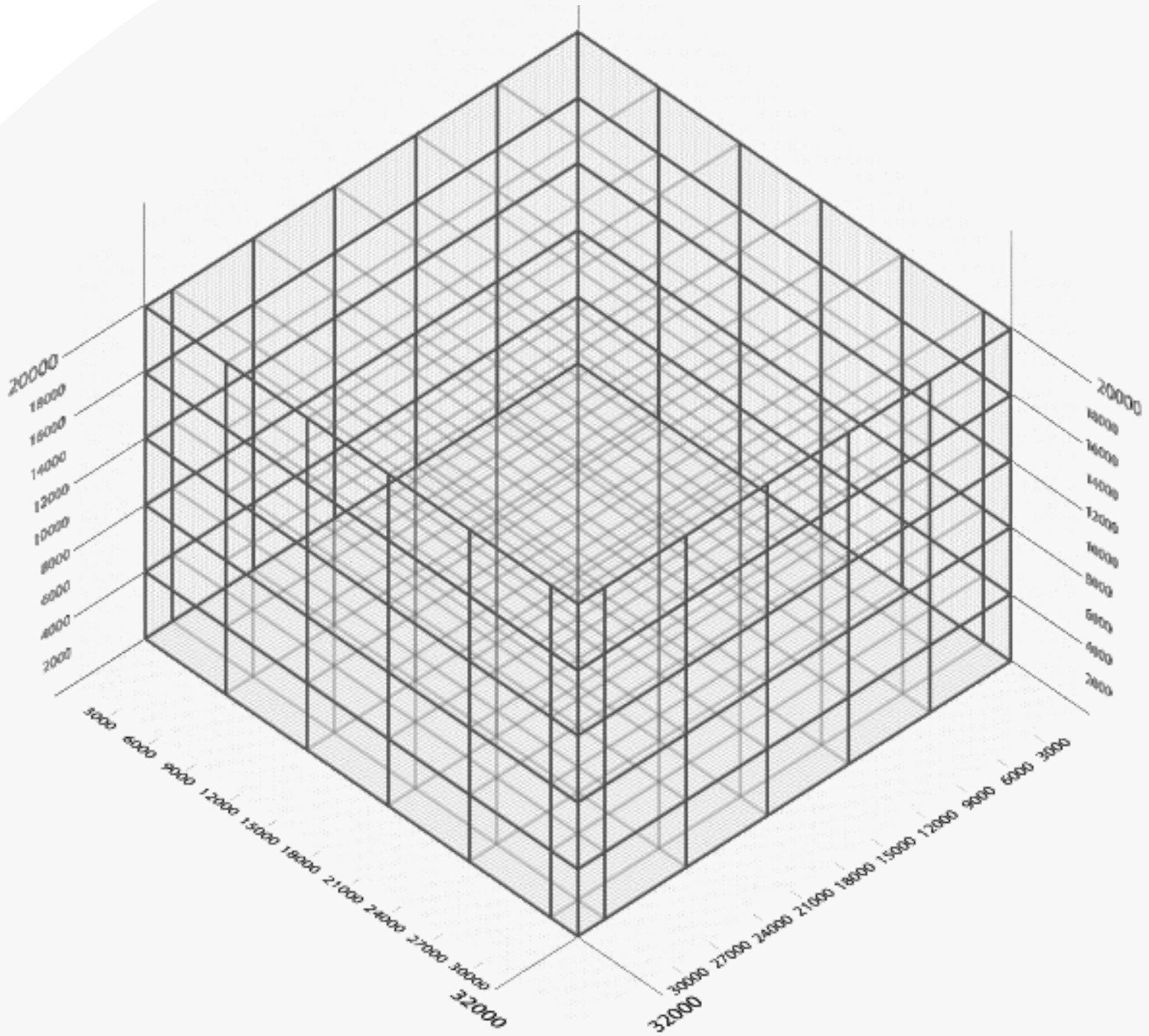
- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

V>GIANT 150 Series

design as you like...

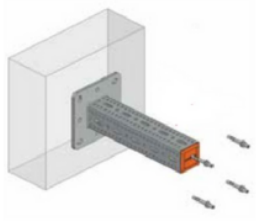


V>GIANT 150 Series



Base Module : 6.0 x 6.0 x 4.0 m

Smart Connection



PMKS-HK-150
Promega Connection



PMKS-KD-120
Promega Connection



PMKS-KD-101
Promega Connection



PMKS-HK-150
-Promega-Promega
Connection



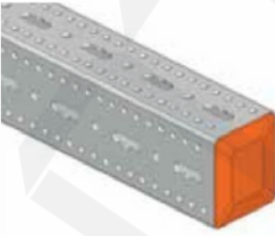
PMKS-KD-121
Promega Connection



PMKS-foot-150/151
Promega Connection



PMKS-TTA-150
Promega Connection



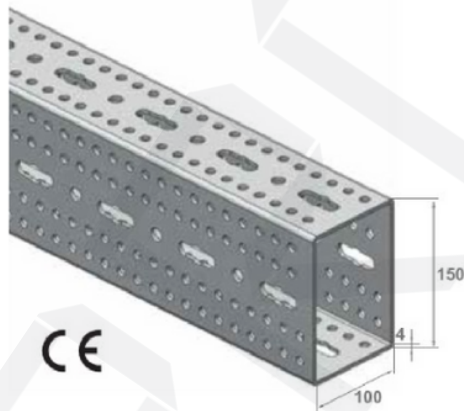
PMKS-PC-150
Promega Connection



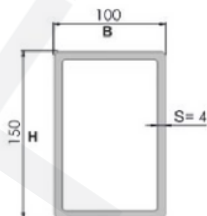
PMKS-MFS-150/151
Promega Connection

ProMAKS Profile

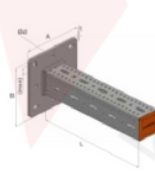
PMKS-PRF-150-001



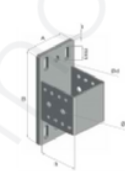
CE



Connection Pieces



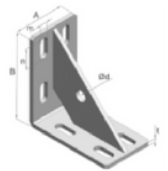
PMKS-HK-150



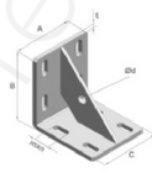
PMKS-KA-120



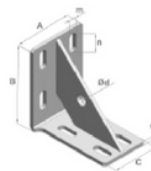
PMKS-KD-100



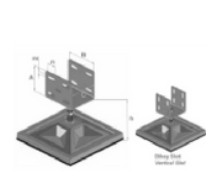
PMKS-KD-101



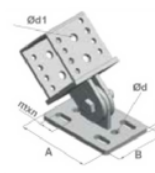
PMKS-KD-120



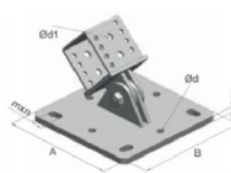
PMKS-KD-121



PMKS-FOOT-150/151



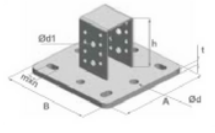
PMKS-MFS-150



PMKS-MFS-151

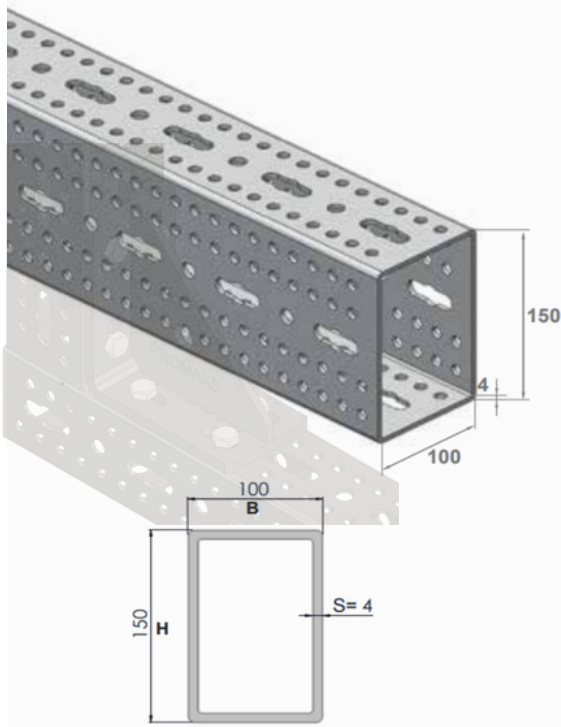


PMKS-PC-150



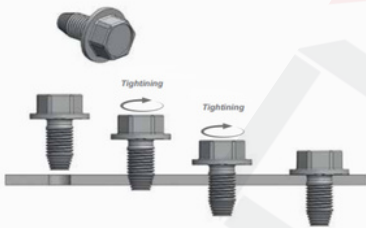
PMKS-TTA-150

Heavy Duty V-GIANT Series Structural System



Service

Promaks is modular kit structural system, provide easy installation with self-threading bolt and high load capacity due to its special design.



Materials and Type

Steel S235 JR

Coating

EN 1461 Hot-dip galvanized
92µm minimum Hot-dip of galvanize.

Section Properties

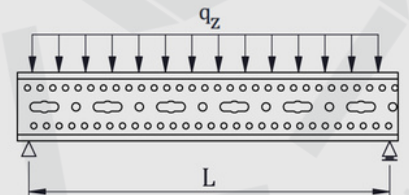
| Profile Size | | | Unit Weight (kg) | Cross Section Area (mm ²) | Torsional Section Modulus (cm ³) | Torsion Moment of Inertia (cm ⁴) | Moment of Inertia (cm ⁴) | | Section Modulus (cm ³) | |
|--------------|-----|---|---------------------|--|---|---|---|----------------|---------------------------------------|----------------|
| H | B | S | | | | | I _y | I _z | W _y | W _z |
| 150 | 100 | 4 | 12 | 1235,00 | 112,06 | 618,26 | 404,80 | 213,46 | 53,97 | 42,69 |

■ The section properties is determined according to the perforated section.

Distributed load

| Lmax (mm) | q _z , perm kN/m | F _z , (q _z , perm *L) kN |
|--------------|-------------------------------|---|
| 1000 | 71,00 | 71,00 |
| 2000 | 17,80 | 35,60 |
| 3000 | 7,90 | 23,70 |
| 4000 | 3,50 | 14,00 |
| 5000 | 1,75 | 8,75 |
| 6000 | 0,97 | 5,82 |

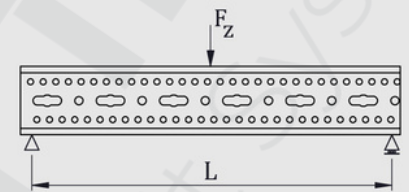
q_z[kN/m] as permanent load at L



Point load

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 35,30 |
| 2000 | 17,80 |
| 3000 | 11,60 |
| 4000 | 8,70 |
| 5000 | 5,40 |
| 6000 | 3,60 |

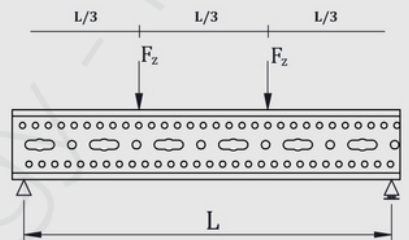
F_z[kN] as permanent load at L/2



2 point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 26,00 |
| 2000 | 13,30 |
| 3000 | 8,80 |
| 4000 | 5,20 |
| 5000 | 3,10 |
| 6000 | 2,10 |

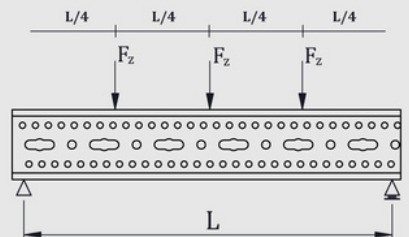
F_z[kN] as permanent load at L/2 and 2*L/3



3 point loads

| Lmax (mm) | F _z , perm kN |
|--------------|-----------------------------|
| 1000 | 17,90 |
| 2000 | 8,90 |
| 3000 | 5,90 |
| 4000 | 3,60 |
| 5000 | 2,30 |
| 6000 | 1,50 |

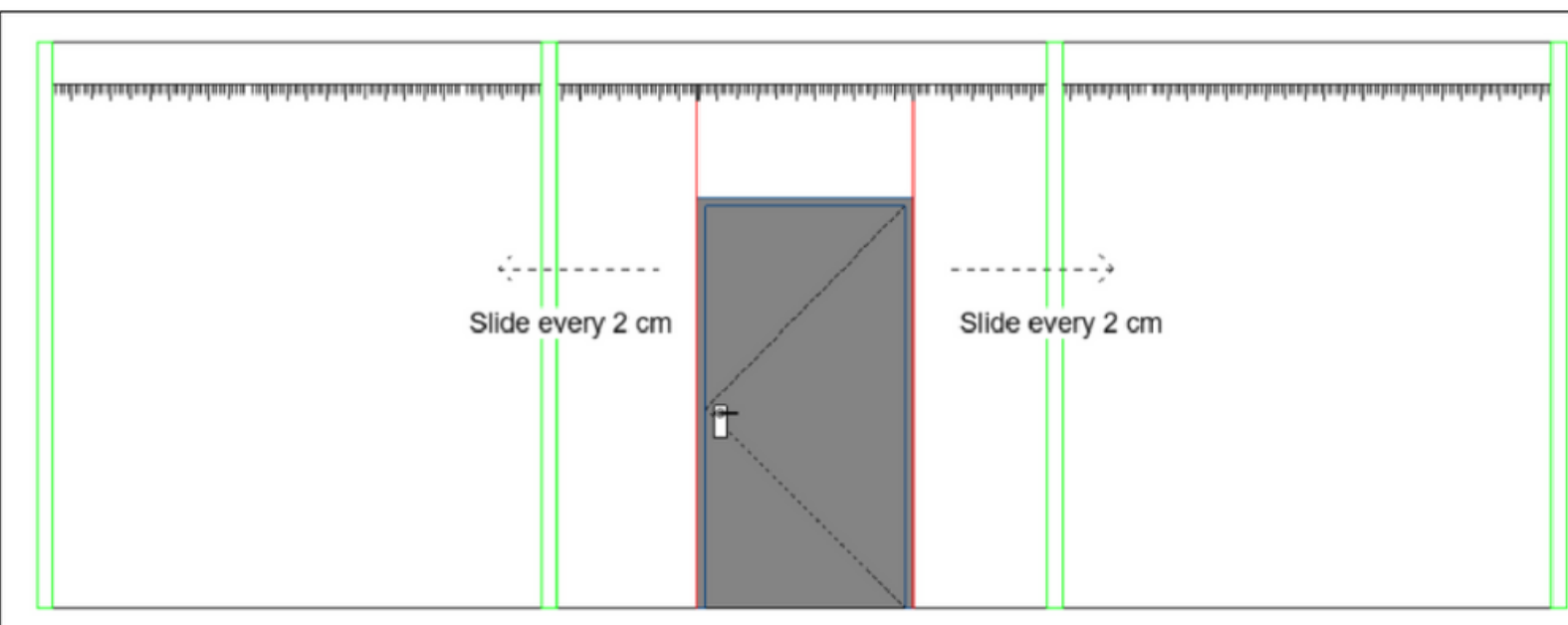
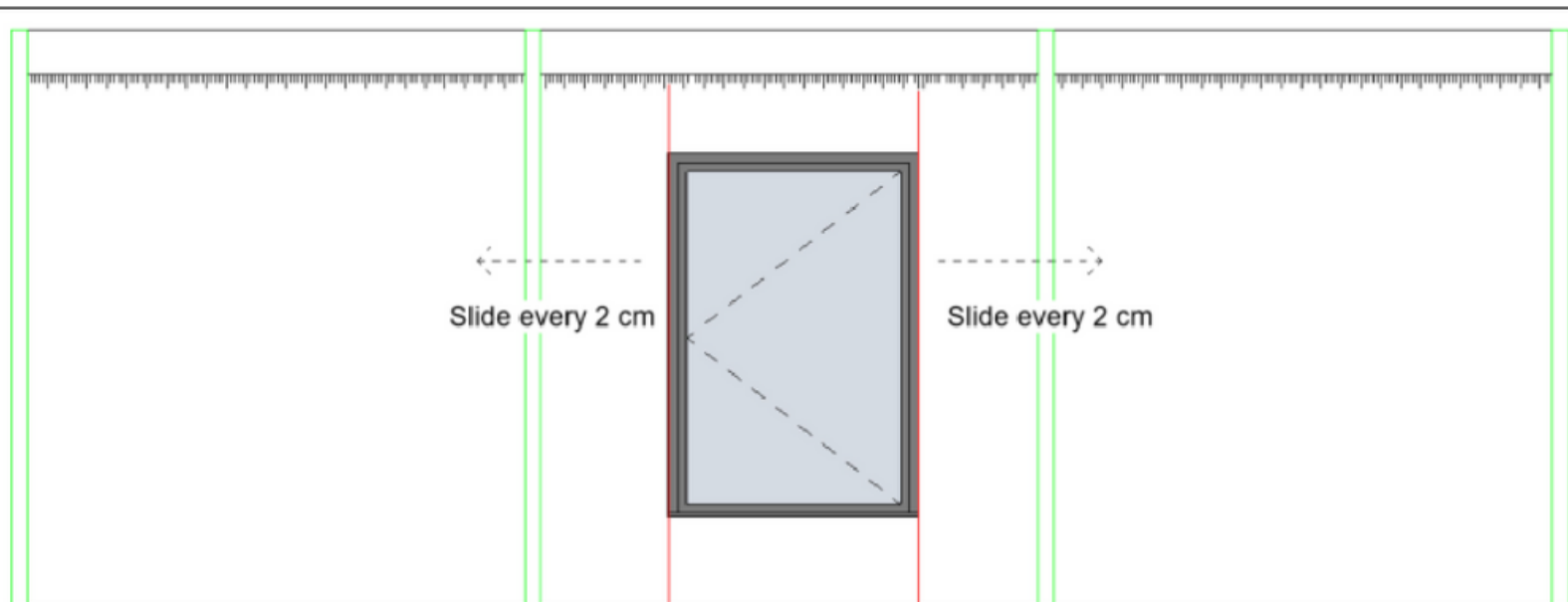
F_z[kN] as permanent load at L/4, L/2 and 3*L/4



- Basis of calculation of the load capacity is accordance with Eurocode 3 (EN 1993)
- Self weight considered.
- Safety factor is taken into account as 1,35.
- Deflection limit value is L/200.

WINDOWS DOORS

ProMAKS system flexibility allows for late stage design changes even on the construction site



ZERTIFIKAT | CERTIFICATE | CERTIFICADO | CERTIFICAZIONE | CERTIFICAZIONE | CERTIFICAZIONE



CERTIFICATE

of conformity
of the factory production control

No.: 0408-CPR-TA3643

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9th March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

Components for Steel structures

| harmonized Standard | execution class | declaration method |
|------------------------|--|-------------------------------------|
| EN 1090-1:2009+A1:2011 | Load bearing steel components with corrosion protection up to EXC 2 acc. EN 1090-2 | 1 and 3a acc. Tab. A.1 of EN 1090-1 |

produced by or for
**LINK YAPI SANAYI VE TICARET ANONIM SİRKETİ
GEBZE ORGANİZE SANAYİ BÖLGESİ 1000.SK NO:1016
ÇAYIROVA, KOCELI / TÜRKİYE**

and produced in the manufacturing plant (s)
**LINK YAPI SANAYI VE TICARET ANONIM SİRKETİ
GEBZE ORGANİZE SANAYİ BÖLGESİ 1000.SK NO:1016
ÇAYIROVA, KOCELI / TÜRKİYE**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard (s)
EN 1090-1:2009+A1:2011
under system 2+ are applied and that
the factory production control fulfills all the prescribed requirements set out above.

This certificate was first issued on **28.07.2020** and will remain valid as long as the test methods and/or factory production control requirements included in the harmonized standard, used to assess the performance of the declared characteristics, do not change and the product, and the manufacturing conditions in the plant are not modified significantly. The next surveillance is due on **27.07.2023**.

Leonding 02.08.2022

PLACE DATE

Mustafak Alexander
DIGITALLY SIGNED
CERTIFICATION BODY

TÜV AUSTRIA SERVICES GMBH
Deutschstraße 10
A-1230 Wien



ZERTIFIKAT | CERTIFICATE | CERTIFICADO | CERTIFICAZIONE | CERTIFICAZIONE | CERTIFICAZIONE



WELDING CERTIFICATE

Certificate No.: 0408-CPR-TA3643

Manufacturer
LINK YAPI SANAYI VE TICARET ANONIM SİRKETİ
GEBZE ORGANİZE SANAYİ BÖLGESİ 1000.SK NO:1016
ÇAYIROVA, KOCELI / TÜRKİYE

Factories
LINK YAPI SANAYI VE TICARET ANONIM SİRKETİ
GEBZE ORGANİZE SANAYİ BÖLGESİ 1000.SK NO:1016
ÇAYIROVA, KOCELI / TÜRKİYE

Standard
EN 1090-1:2009+A1:2011
EN 1090-2:2018

Execution Classes
Up to EXC 2

Welding Processes
(According to ISO 4063)
135 – Metal Active Gas Welding
212 – Resistance Spot Welding
741 – Induction Welding

Parent Metals
Group 1.1 and 1.2 acc. to CEN ISO/TR 15608 and EN 1090-2, Table 2 and 3
Group 8.1 acc. to CEN ISO/TR 15608 and EN 1090-2, Table 4

Responsible Welding Coordinator
Balhan LINCU (IWE), 17/09/1993
Level (C) acc. to EN 1090-2, 7.4.3

Deputies
–

Confirmation
It is confirmed that all procedures for the execution and supervision of welding work are available.

Remarks
This welding certificate is only valid within the scope of and in connection with FPC Certificate No.: 0408-CPR-TA3643

Valid from
28.07.2020 (first day of issue)

Next Surveillance
27.07.2023

Leonding 02.08.2022

PLACE DATE

Mustafak Alexander
DIGITALLY SIGNED
CERTIFICATION BODY

TÜV AUSTRIA SERVICES GMBH
Deutschstraße 10
A-1230 Wien



ДОБРОВОЛЬНАЯ СЕРТИФИКАЦИЯ ПРОДУКЦИИ

Система добровольной сертификации в области промышленной и сельскохозяйственной деятельности "СвирьТест" в составе "СвирьТест" – добровольная Федеральная организация по стандартизации, сертификации и метрологии 11.04.2016 г.
регистрационный № РОСС RU.1485.04НД000.101

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ 04НД0101.ТРС.01160

Срок действия с 23.08.2021 по 22.08.2024

№ 1301485

ОРГАН ПО СЕРТИФИКАЦИИ Общество с ограниченной ответственностью «СвирьТест», Место нахождения (адрес юридического лица): 443030, РОССИЯ, Самарская область, город Самара, улица Урицкого, дом 19. Адрес места осуществления деятельности: 443030, РОССИЯ, Самарская область, Железнодорожный район, город Самара, улица Урицкого, дом 19, комнаты 45, 46, 48, 49. Телефон: +7(846)230-03-79. Адрес электронной почты: info@svirtest.ru. Свидетельство о государственной аккредитации органа по сертификации № РОСС RU.1485.04НД000.101 от 20.05.2021 года

ПРОДУКЦИЯ Крепежные изделия для монтажных работ, городской марки «LINK», «ФромМед»

Сертификат выдан

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ НОРМАТИВНЫХ ДОКУМЕНТОВ Стандарты изготовителя

ИЗГОТОВИТЕЛЬ «LINK YAPI SANAYI VE TICARET A.Ş.» Юридический адрес: Gebze OSB Mahallesi 1000, Cadde No:1016/1 Çayirova Köyü/Türkiye

СЕРТИФИКАТ ВЫДАН Обществу с ограниченной ответственностью «Мир Технологии» Юридический адрес: 117041, город Москва, улица Алавердан Рувкина, дом 4, этаж 6, помещение IV, офис 613. Телефон: 74954814150. E-mail: MirTechnology@gmail.com. ИНН: 7727360710

НА ОСНОВАНИИ Протокола испытаний № 195-21-08 от 20.08.2021 года, выданного испытательным центром Электротехнический завод «СтройМонтаж» Закрытого акционерного общества Науко-производственный центр «СТРОЙМОНТАЖ»

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Схема сертификации: К

Руководитель органа

Эксперт

И.В. Давыдов
инженер, специалист

Ф.Ю. Яковлев
инженер, специалист






**FM
APPROVED**

Certificate of Compliance

This certificate is issued for the following:

Seismic Sway Brace Components for Pipe, Tubing and Conduit

(see details attached)

Prepared for:

Link Yapi Sanayi Ve Ticaret AS
Gebze Organize Sanayi Bolgesi 1000
Sokak No 1016
Çayirova, Kocaeli 41400
Turkey

Manufactured at:

Link Yapi Sanayi Ve Ticaret AS
Gebze Organize Sanayi Bolgesi 1000
Sokak No 1016
Çayirova, Kocaeli 41400
Turkey

FM Approvals Class: 1950 (September 2013)

Approval Identification: 0003062495 Approval Granted: November 12, 2019

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.



David Fuller
VP - Manager of Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062



FM Approvals®

Member of the FM Global Group

Page 1 of 3

TÜV NORD TURKEY Industrial Services
Inspection Report

| | | | |
|-------------------|---|-----------------------|---|
| INSPECTOR | Özgin Ozan TÜRK | TÜV ORDER NO. | 211445326 |
| PLACE & DATE | İTÜ Kompozit ve Yapı Lab.-03.12.2019 | REPORT NO | RP-211445326-03 |
| CUSTOMER | Link Yapı San. ve Tic. A.Ş. | MANUFACTURER | N/A |
| CUSTOMER ORDER NO | - | MANUFACTURER ORDER NO | - |
| INSPECTION DATES | 03.12.2019 | MANUFACTURER CONTACT | - |
| CUSTOMER CONTACTS | Ömer Çelöz | HARD STAMP | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| REPORT TYPE | <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Interim <input type="checkbox"/> Final | | |
| ANNEXES | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |

SUBJECT OF INSPECTION

Prestressed steel wire ropes for Seismic Brace System were subjected to tensile test under dynamic loads by following the test procedure in ANSI/ASHRAE Standart 171-2017 to rate the capacity of seismic and wind restraints of ropes and seismic link system which Link Yapı San. ve Tic. A.Ş. has (See Table 1.) and to evaluate the minimizing ability about the differential movement between a component and the supporting building structure during an earthquake or a high-wind event by determining the maximum loads the single directional single axis restraint can withstand without breakage or excessive deformation.

* ANSI/ASHRAE Standart 171-2017 was accepted as guide during inspection.

| Model | Diameter (mm) | Serial Number |
|--------|---------------|-----------------|
| STB 11 | 1.6 | 0334.1.STB.511G |
| STB 12 | 2.4 | 0334.1.STB.512G |
| STB 13 | 3.2 | 0334.1.STB.513G |
| | 4.8 | 0334.1.STB.515G |

Table 1. Product Tested

PROJECT PROGRESS

Three sample of each model were subjected to test for each angle 30°, 45° and 60° by using fixtures to arrange the angles. Anticipated maximum capacity loads (See Table 2) were declared by Link Yapı San. ve Tic. A.Ş. Conformity of loading cycles and frequencies were controlled and approved for each model acc. to ANSI/ASHRAE Standart 171-2017. Load application frequency was seen as 0.1 Hz as indicated in the standart. Loadings were done in periodic and continuous cycles. It was seen that Link Yapı San. ve Tic. A.Ş. followed the loading steps below as indicated in the standart.

22-IS-0424

PROLINK G PROFILE
&
PLGMK EASY-LOCK SEISMIC TESTS
INSPECTION REPORT

Inspection Requesting: LINK YAPI SAN. VE TIC. A.Ş.
 Gebze Organize Sanayi Bölgesi, 1000. Sokak, NO:1016,
 Çayırova - Kocaeli

Inspection Address: SABANCI ÜNİVERSİTESİ
 İstanbul Teknoloji Geliştirme Bölgesi,
 Teknopark Bulvarı, No:1 34906 Pendik /İSTANBUL

Inspection Dates: 28.03.2022

Report No: 22-IS-0424-TAT-22-0139

Report Date: 23.06.2022

Report Published: TÜV AUSTRIA TURK Belgelendirme Eğitim ve Gözetim Hizmetleri Ltd.
 Şti.
 Çamlık Mah. İkbal Cad. Diğ Sok. No:28/1 Ümraniye / İstanbul



Technical and Test Institute
 for Construction Prague
 Prosecká 811/76a
 190 00 Prague
 Czech Republic
ecta@zus.cz



www.eta.eu

**European Technical
 Assessment**

**ETA 18/0441
 of 03/06/2018**

Technical Assessment Body issuing the ETA: Technical and Test Institute
 for Construction Prague

Trade name of the construction product LT

Product family to which the construction product belongs Product area code: 33
 Torque controlled expansion anchor
 for use in uncracked concrete

Manufacturer LINK YAPI SAN. VE TIC. A.Ş.
 GOSB 1000 CD. NO:1016
 ÇAYIROVA – GEBZE
 KOCAELİ
 TURKEY

Manufacturing plant Manufacturing Plant No 2

This European Technical Assessment contains 10 pages including 8 Annexes which form
 an integral part of this assessment

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of EAD 330232-00-0601
 Mechanical fasteners for use in concrete

This version is a corrigendum to ETA 18/0441 of 03/06/2018

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (excepted the confidential Annex(es) referred to above). However, partial reproduction may be made, with the written consent of the issuing Technical Assessment Body - Technical and Test Institute for Construction Prague. Any partial reproduction has to be identified as such.

FIRST QUALITY CERTIFICATION

SERTİFİKA

Bu Sertifika,
LİNK YAPI SANAYİ VE TİCARET ANONİM ŞİRKETİ
 Gebze Organize Sanayi Bölgesi 1000.Sokak No:1016
 Çayırova / Kocaeli / Türkiye

kuruluşunun,
BORU AŞKI VE DESTEK SİSTEMLERİ, HAVA KANALI BAĞLANTI SİSTEMLERİ, SES VE TİTREŞİM KONTROL SİSTEMLERİ, SİSMİK SINIRLAYICILAR, PROLINK YAPI PROFİLLERİ VE BAĞLANTI ELEMANLARI PROCON ENDÜSTRİYEL YAPI PROFİLLERİ VE BAĞLANTI ELEMANLARI, ENDÜSTRİYEL YAPI SİSTEMLERİ

EA 17
 kapsamında,
ISO 9001:2015

Kalite Yönetim Sistemi standartlarının şartlarına uyan bir yönetim sistemi kurduğunu ve uyguladığını onaylamak üzere verilmiştir.

İlk Veriliş Tarihi : 24.03.2009
Belge Geçerlilik Tarihi : 23.03.2021
Belge Tarihi : 23.03.2022
Belge Periyodu : 3 Yıl
Bitiş Tarihi : 23.03.2023
Sertifika No : 01.09.0440.5317.D

First Quality Certification
 Sistem Akademi Kurumları
 Maltepe / İstanbul / Türkiye

FOC, India & Nepal Office
 FOC (First Quality Certification) Pvt. Ltd.
 303 37, Sector 12, Park Road - Gurgaon, Haryana, India
 T: +91 121 6262070 F: +91 121 4416201
www.fqcindia.com info@fqcindia.com

FOC, Turkey & Critical Location
 FOC (First Quality Certification) Inc. USA, Inc.
 6000 Main, Tolland Ct. No 1210 Blok A D. 29-29 Mahallesi / İstanbul / Türkiye
 T: +90 216 484 21 41 F: +90 216 422 90 80 F1: +90 216 422 90 80
www.fqcindia.com info@fqcindia.com

Bu belge, müşterinin FOC'ün kurallarına ve diğerlerine tamamen uyduğu sürece geçerlidir. Sertifika geçerliliği durumu FOC'ün internet sitesinde takip edilebilir.
 The document shall remain valid as long as the customer abides FOC rules and terms of the contract. Certificate validity may be checked on FOC website.