TRAY SUPPORT BLOCK USER GUIDE

BRO-A-158 V2.1.1
Reviewed: 20250904 SW

Printed copy is uncontrolled.

USER GUIDE

PERFORM RISK ASSESSMENT FIRST

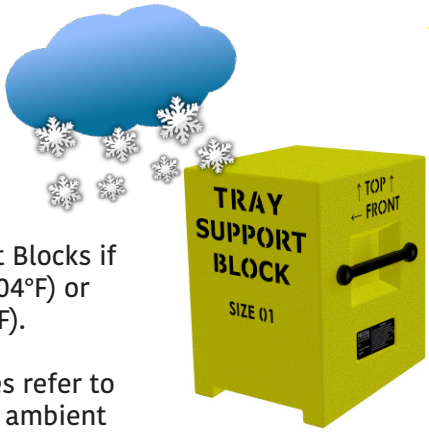
SAFETY IS PARAMOUNT.
Machinery and conditions can change from site to site so it is essential to ensure a risk assessment is completed for each application, in accordance with your Workplace Health & Safety requirements.

INSPECT YOUR TRAY SUPPORT BLOCKS

Ensure you inspect all Tray Support Blocks prior to use, for damage that may affect its safe operation.

If there are any signs of damage, discard item & DO NOT USE.

TEMPERATURE OF YOUR TRAY SUPPORT BLOCKS



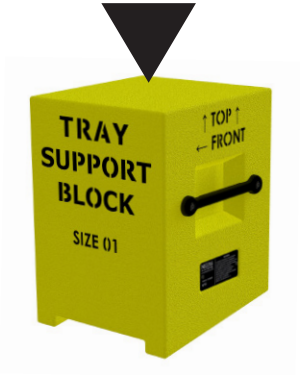
DO NOT USE Tray Support Blocks if they are above 40°C (104°F) or below -50°C (-58°F).

Note: These temperatures refer to the actual item, not the ambient temperatures

WEIGHT AND IMPACT

Ensure you know the weight of the load being placed on the Tray Support Block.

DO NOT point load



ALWAYS calculate the load area - refer to pages 5 - 28 for guide.

Always lower the load onto the Tray Support Block carefully.

Impact may create a force greater than the load capacity and damage the block.

WHICH TRAY SUPPORT BLOCK TO USE?

Note 1:

Each block has been designed to suit a particular truck model, however, many trucks have variations during manufacture. Many now have after market trays which vary in weight and size so we are unable to guarantee the truck model compatibility.

The following is a guide for truck suitability but you must confirm the product is suitable for your specific application by conducting your own risk assessment.

TRAY SUPPORT BLOCKS SUITABILITY

TAKE THE GUESS WORK OUT OF SUPPORTING TRAYS

>> IMPROVE YOUR WORKPLACE SAFETY

>> INCREASE YOUR WORKERS CONFIDENCE

>> REDUCE SERVICE TIME - SAVE $$$

IDEAL FOR:

>> PROVIDING SAFE ACCESS UNDER TRAY

>> HOIST CYLINDER CHANGE OUTS

>> ALLOWING MULTIPLE MAINTENANCE TASKS SIMULTANEOUSLY

>> PROVIDING FLAT TRAY WORK SURFACE

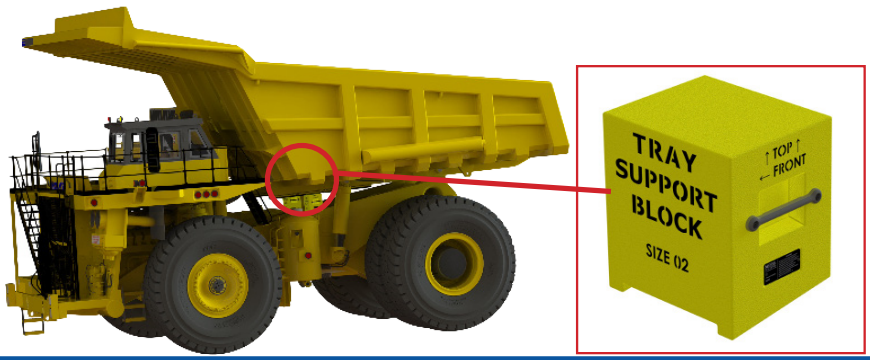
OUR SUPPORT BLOCK IS:

>> LOAD RATED

>> BUILT FOR PURPOSE

>> LIGHTWEIGHT

>> SUITABLE FOR MOST TRUCKS



TRAY SUPPORT BLOCKS SUITABILITY

To Suit Mine Trucks

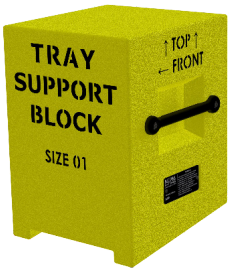
PRODUCT NUMBER	TRAY SUPPORT BLOCK	WEIGHT	MAKE	SERIES
NPR06253-00	Size 1	18.5kg	Caterpillar	793, 789, 785, 777 & 730
NPR05233-00	Size 2	24kg	Caterpillar	793 830E & 930E
NPR06358-00	Size 3	21.5kg	Terex Liebherr	MT4400 T282C
NPR07087-00	Size 5	20kg	Caterpillar	795
NPR07226-00	Size 6	11kg	Caterpillar	793 *NOTE: Not for chassis. Use for headboard support only
NPR07678-00	Size 7	20.5kg	Caterpillar	797
NPR08172-00	Size 9	16kg	Caterpillar	789
NPR08264-00	Size 10	29kg	Caterpillar	796
NPR08270-00	Size 11	23kg	Hitachi	EH5000
NPR08542-00	Size 14	18kg	Komatsu	HD1500 & HD785
NPR08531-00	Size 16	15kg	Hitachi	EH4000
NPR08584-00	Size 17	34kg	Liebherr	T264

SET UP FOR TRAY SUPPORT BLOCK - SIZE 01
PART NO: NPR06253-00

Suits CAT 793, 789, 785 & 777 Standard Model Truck
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.



18.5kg

EXAMPLE 1

Chassis rail contact area
22cm x 35cm x 30kg = 23,100kg

Tray rail contact area
20cm x 35cm x 30kg = **21,000kg**

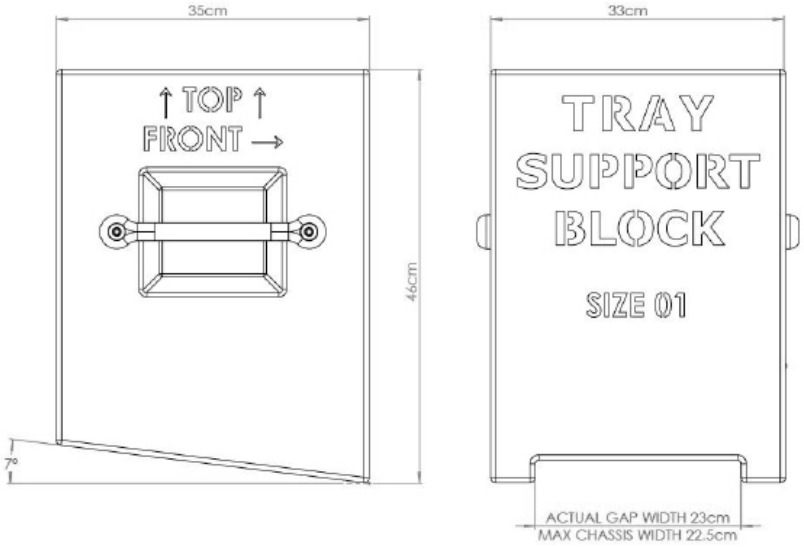
In this scenario the result = **load rating is 21,000kg per block**

EXAMPLE 2

Chassis rail contact area
22cm x 35cm x 30kg = **23,100kg**

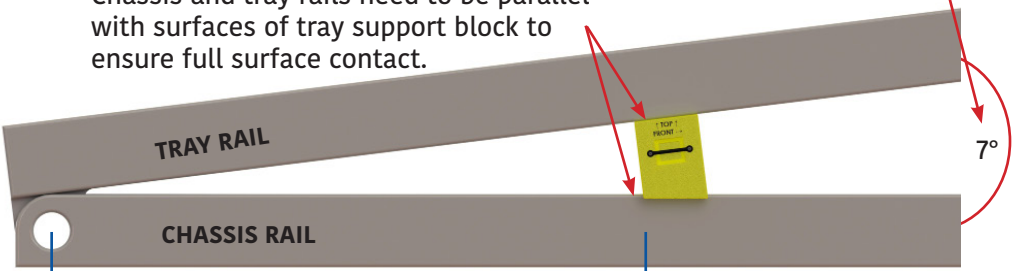
Tray rail contact area
28cm x 35cm x 30kg = 29,400kg

In this scenario the result = **load rating is 23,100kg per block**



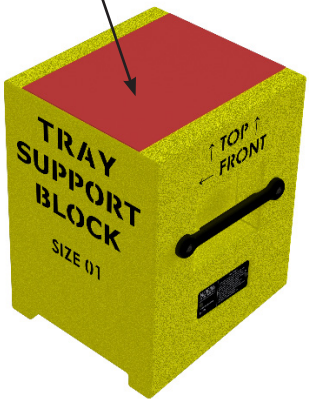
As a guide, the angle between the chassis and tray should be 7°.

Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact.

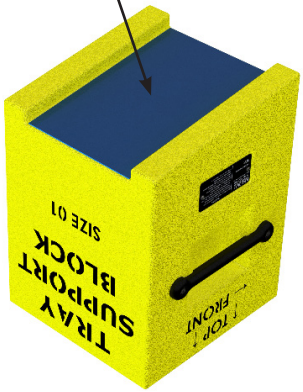


As a guide, the rear of the block should be 3.2m from the pivot point of the chassis and tray.

Tray rail contact area



Chassis rail contact area

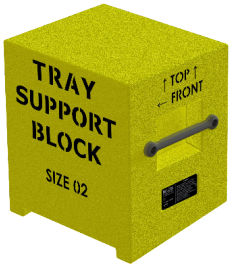


SET UP FOR TRAY SUPPORT BLOCK - SIZE 02
PART NO: NPR05233-00

Suits Komatsu 730, 830 & 930
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.



KG 24kg

EXAMPLE 1

Chassis rail contact area
31cm x 35cm x 30kg = 32,550kg

Tray rail contact area
29cm x 35cm x 30kg = **30,450kg**

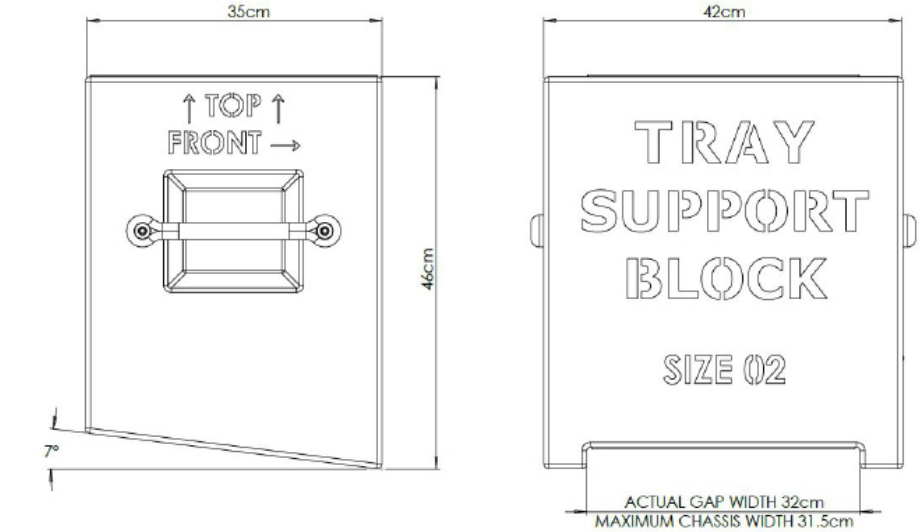
In this scenario the result = **load rating is 30,450kg per block**

EXAMPLE 2

Chassis rail contact area
31cm x 35cm x 30kg = **32,550kgm**

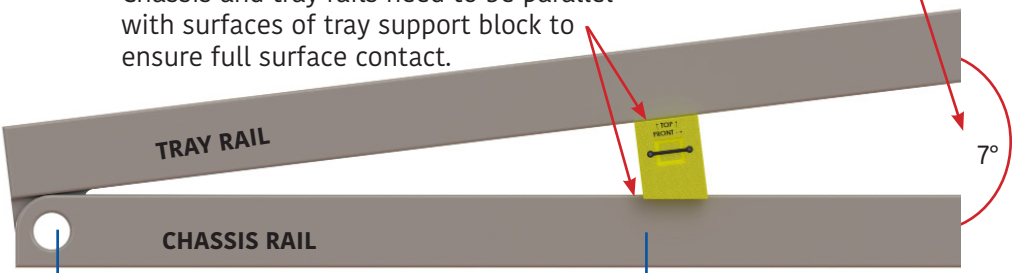
Tray rail contact area
32cm x 35cm x 30kg = 33,600kg

In this scenario the result = **load rating is 32,550kg per block**



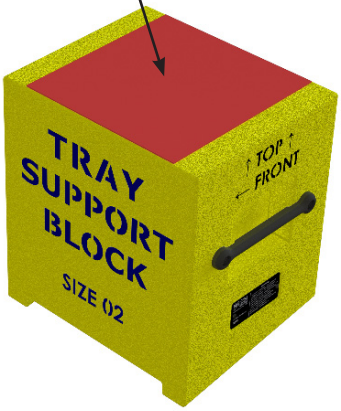
As a guide, the angle between the chassis and tray should be 7°.

Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact.

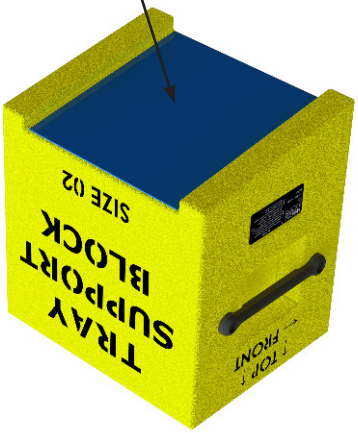


As a guide, the rear of the block should be 3.3m from the pivot point of the chassis and tray.

Tray rail contact area



Chassis rail contact area

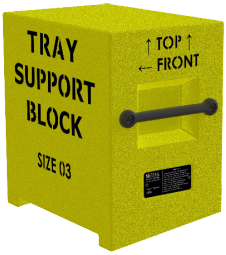


SET UP FOR TRAY SUPPORT BLOCK - SIZE 03
PART NO: NPR06358-00

Suits Caterpillar 794, Terex 4400 & Leibherr T282 Trucks
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.



KG 21.5kg

EXAMPLE 1

Chassis rail contact
34cm x 30cm x 30kg = 30,600kg

Tray rail contact
32cm x 30cm x 30kg = **28,800kg**

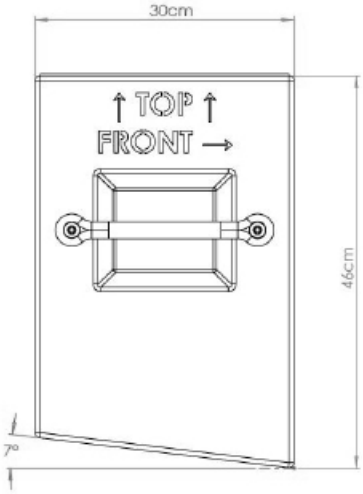
In this scenario the result = **load rating is 28,800kg per block**

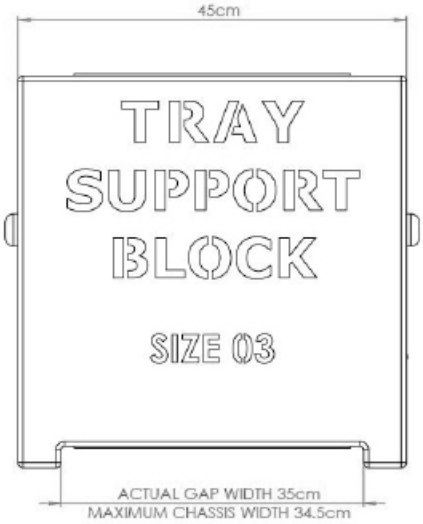
EXAMPLE 2

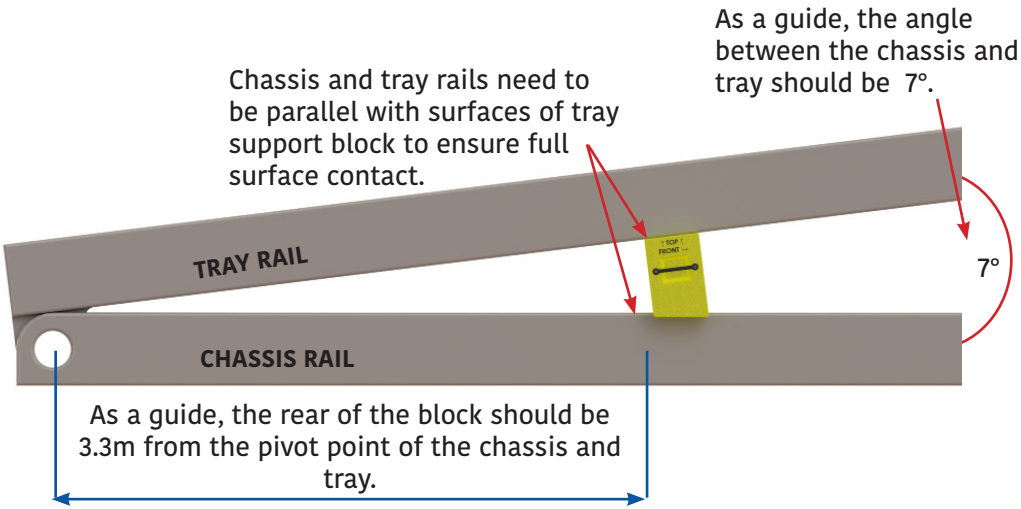
Chassis rail contact
34cm x 30cm x 30kg = **30,600kg**

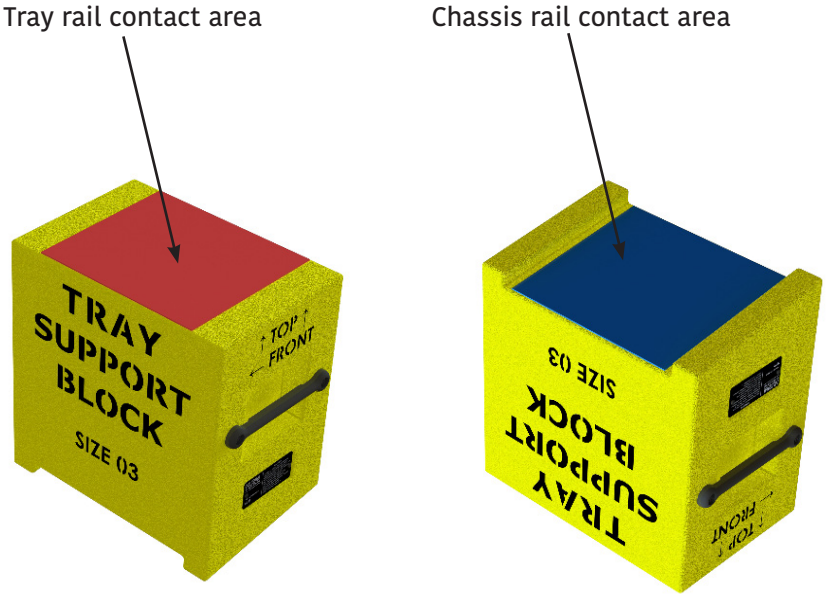
Tray rail contact
36cm x 30cm x 30kg = 32,400kg

In this scenario the result = **load rating is 30,600kg per block**






As a guide, the angle between the chassis and tray should be 7°.
Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact.
TRAY RAIL
CHASSIS RAIL
7°
As a guide, the rear of the block should be 3.3m from the pivot point of the chassis and tray.


Tray rail contact area
Chassis rail contact area
TRAY SUPPORT BLOCK
SIZE 03
TOP
FRONT

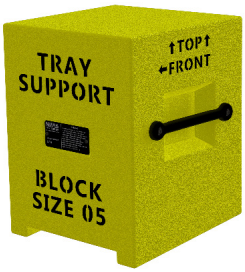
Note: The size 04 has been omitted intentionally.

Suits CAT 795 Truck
*refer note 1 on page 2

SET UP FOR TRAY SUPPORT BLOCK - SIZE 05
PART NO: NPR07087-00

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.



KG 20kg

EXAMPLE 1

Chassis rail contact
25cm x 35cm x 30kg = 26,250kg

Tray rail contact
22cm x 35cm x 30kg = **23,100kg**

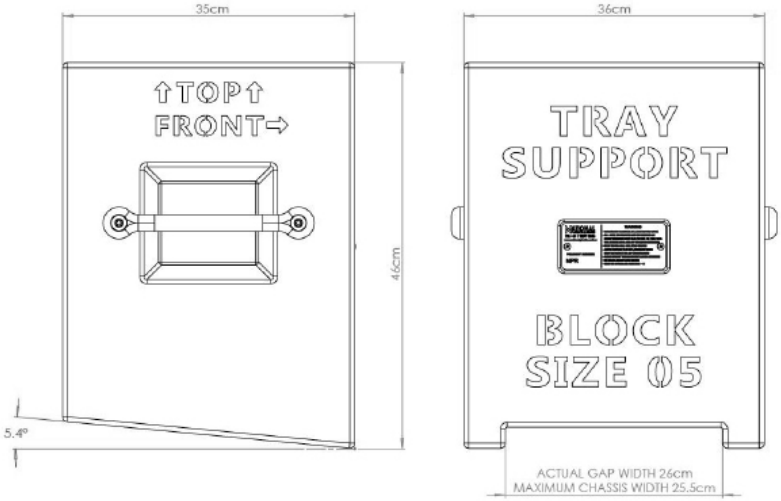
In this scenario the result = **load rating is 23,100kg per block**

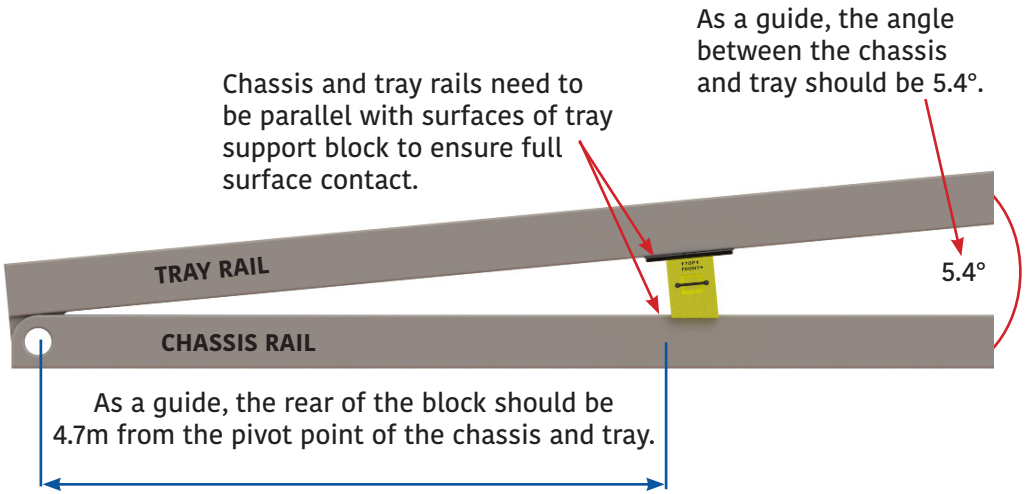
EXAMPLE 2

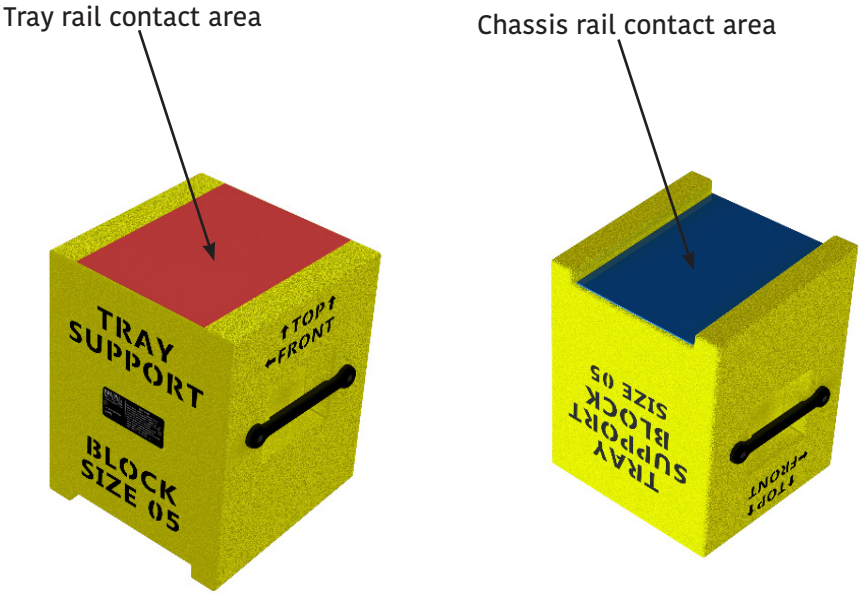
Chassis rail contact
25cm x 35cm x 30kg = **26,250kg**

Tray rail contact
27cm x 35cm x 30kg = 28,350kg

In this scenario the result = **load rating is 26,250kg per block**




As a guide, the angle between the chassis and tray should be 5.4°.
Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact.
TRAY RAIL
CHASSIS RAIL
5.4°
As a guide, the rear of the block should be 4.7m from the pivot point of the chassis and tray.


Tray rail contact area
Chassis rail contact area
TRAY SUPPORT
BLOCK SIZE 05
↑TOP↑
←FRONT

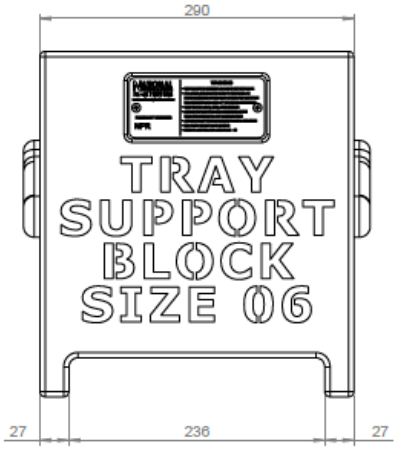
SET UP FOR TRAY SUPPORT BLOCK - SIZE 06
PART NO: NPR07226-00

Suits CAT 793
*refer note 1 on page 2

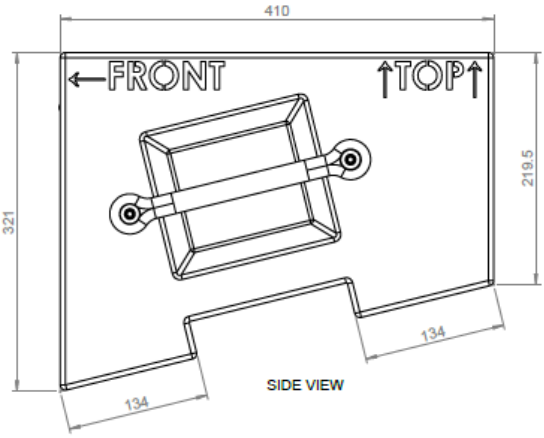
LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.

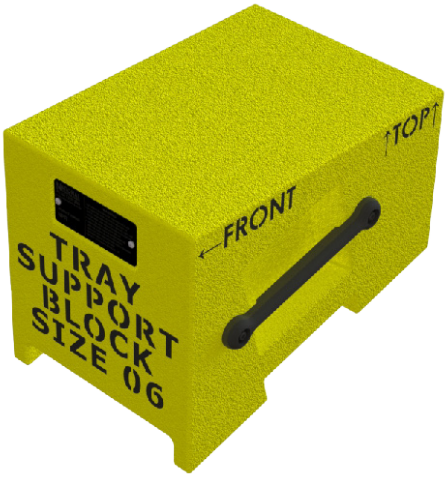
Block Load Rating
23cm x 41cm x 30kg = 28,280kg



FRONT VIEW



SIDE VIEW



KG 11kg

Placement area

SET UP FOR TRAY SUPPORT BLOCK - SIZE 07
PART NO: NPR07678-00

Suits CAT 797
*refer note 1 on page 2

LOAD CALCULATION GUIDE

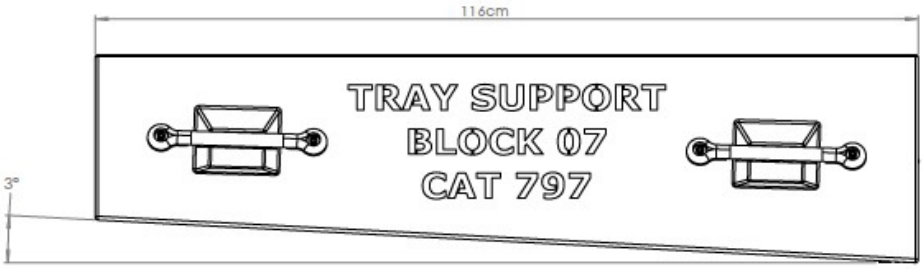
The load calculation is based on the minimum contact area between the tray support block and each rail surface. The rails need to be parallel to the block surfaces.

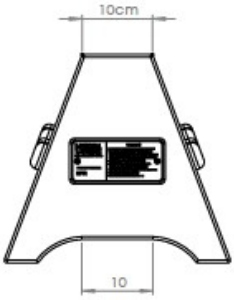
EXAMPLE 1

Chassis rail contact
10cm x 116cm x 30kg = 34,800kg

Tray rail contact
10cm x 116cm x 30kg = **34,800kg**

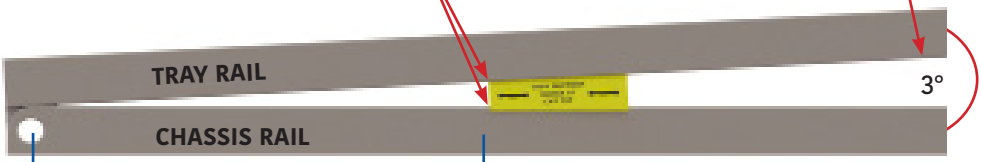
In this scenario the result = **load rating is 34,800 kg per block**





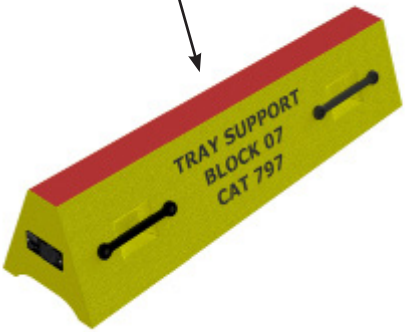
Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact

As a guide, the angle between the chassis and tray should be 3°

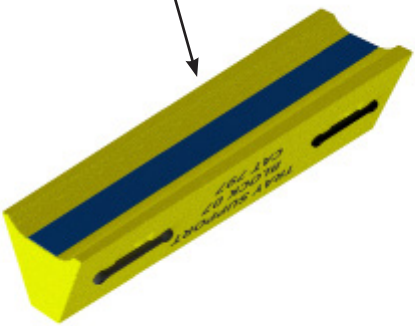


As a guide, the rear of the block should be approx 3.84m from the pivot point of the chassis and tray

Tray rail contact area



Chassis rail contact area



SET UP FOR TRAY SUPPORT BLOCK - SIZE 10
PART NO: NPR08264-00

Suits CAT 796
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.

KG 29kg

EXAMPLE 1
Chassis rail contact
31cm x 35cm x 30kg = 32,550kg

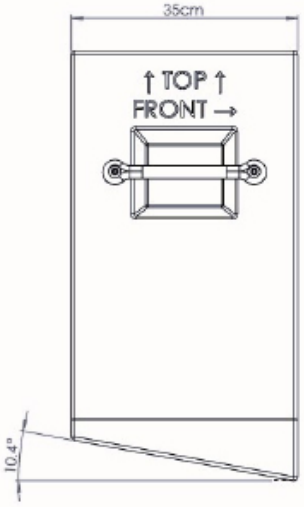
Tray rail contact
20cm x 35cm x 30kg = **21,000kg**

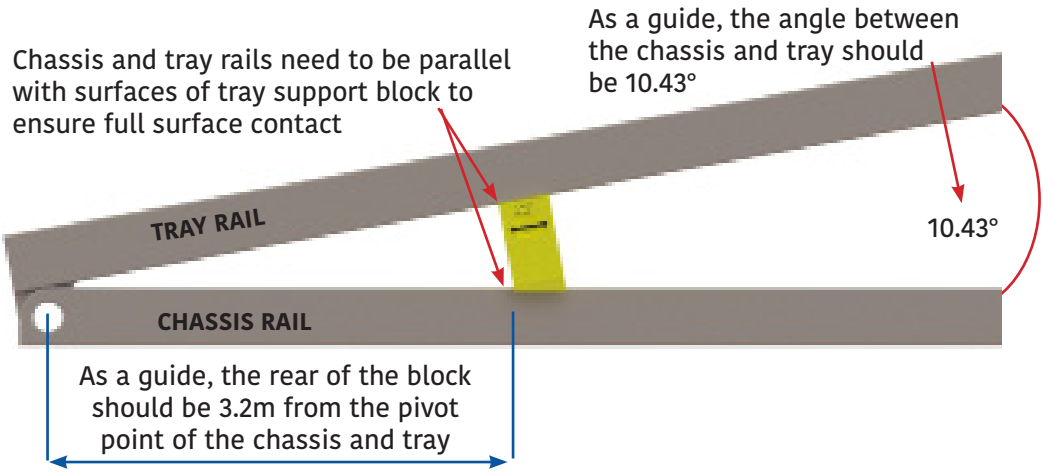
In this scenario the result = **load rating is 21,000kg per block**

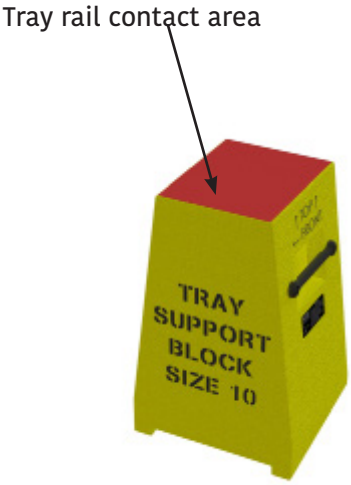
EXAMPLE 2
Chassis rail contact
27cm x 35cm x 30kg = **28,350kg**

Tray rail contact
28cm x 35cm x 30kg = 29,400kg

In this scenario the result = **load rating is 28,350kg per block**




Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact
As a guide, the angle between the chassis and tray should be 10.43°
TRAY RAIL
10.43°
CHASSIS RAIL
As a guide, the rear of the block should be 3.2m from the pivot point of the chassis and tray


Tray rail contact area
TRAY SUPPORT BLOCK SIZE 10

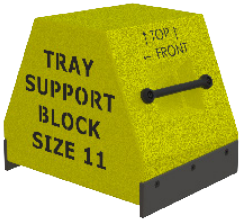
Chassis rail contact area

SET UP FOR TRAY SUPPORT BLOCK - SIZE 11
PART NO: NPR08749-00

Suits Hitachi EH5000
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.



KG 23kg

EXAMPLE 1

Chassis rail contact
47.5cm x 36cm x 30kg = 51,300kg

Tray rail contact
25cm x 36cm x 30kg = **27,000kg**

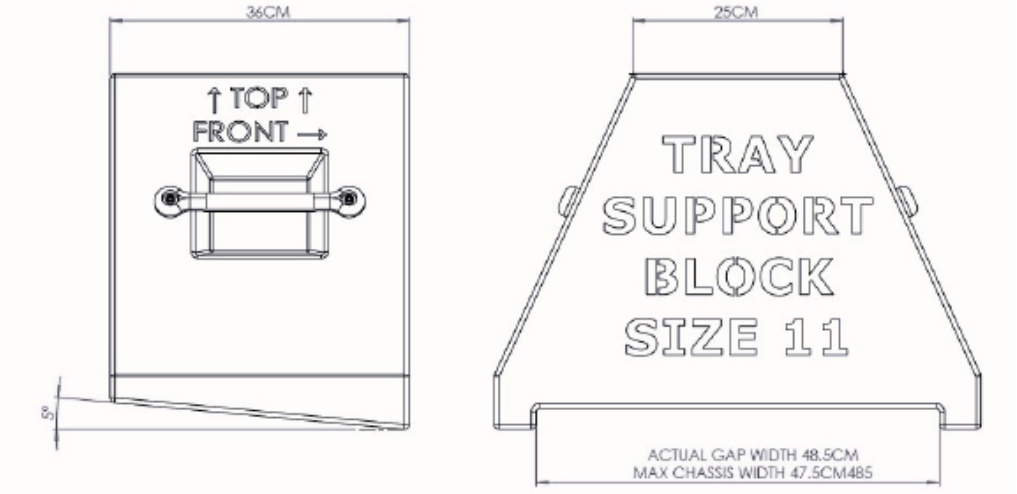
In this scenario the result = **load rating is 27,000kg per block**

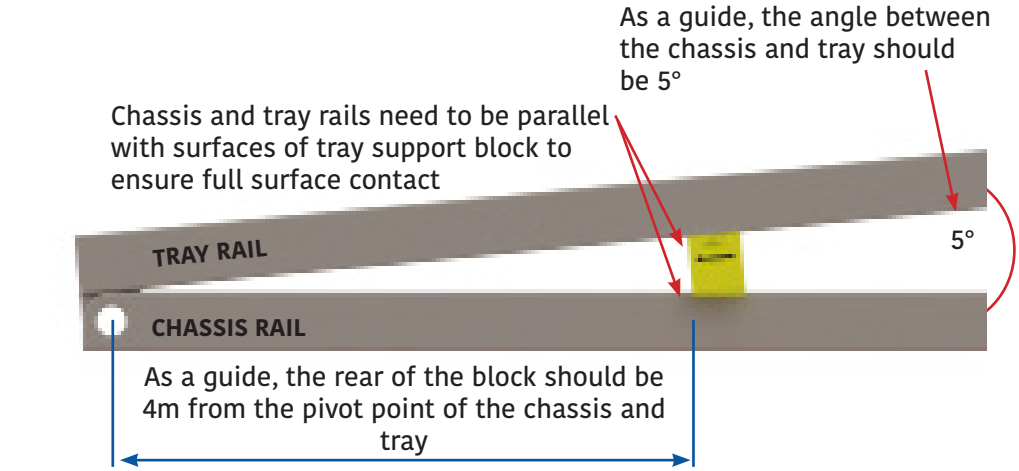
EXAMPLE 2

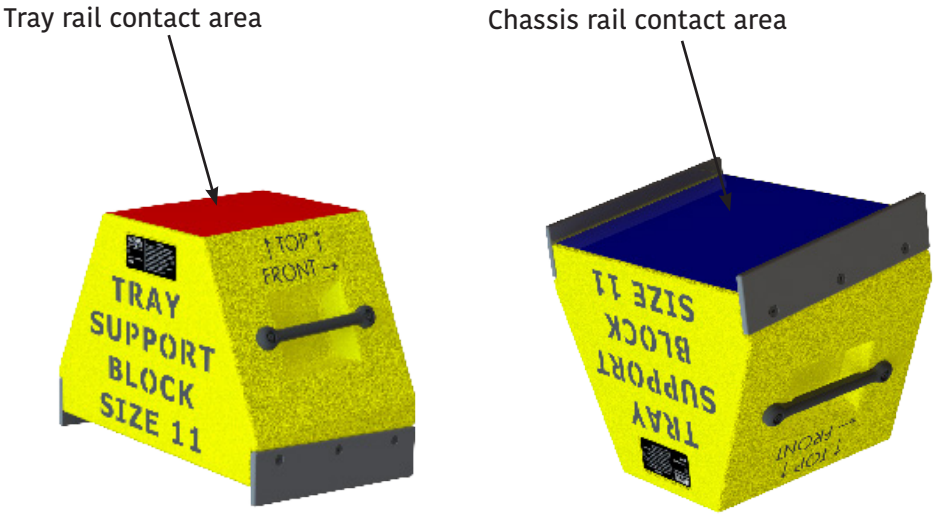
Chassis rail contact
47.5cm x 36cm x 30kg = 51,300kg

Tray rail contact
22cm x 36cm x 30kg = **23,760kg**

In this scenario the result = **load rating is 23,760kg per block**




As a guide, the angle between the chassis and tray should be 5°
Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact
TRAY RAIL
CHASSIS RAIL
5°
As a guide, the rear of the block should be 4m from the pivot point of the chassis and tray


Tray rail contact area
Chassis rail contact area
TRAY SUPPORT BLOCK SIZE 11
TOP
FRONT
TRAY SUPPORT BLOCK SIZE 11

Note: The size 12 & 13 have been omitted intentionally

SET UP FOR TRAY SUPPORT BLOCK - SIZE 14

PART NO: NPR08542-00

Suits KOMATSU HD1500 & HD785
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface. The rails need to be parallel to the block surfaces.

KG 18kg

EXAMPLE 1

Chassis rail contact
47.5cm x 36cm x 30kg = 51,300kg

Tray rail contact
25cm x 36cm x 30kg = **27,000kg**

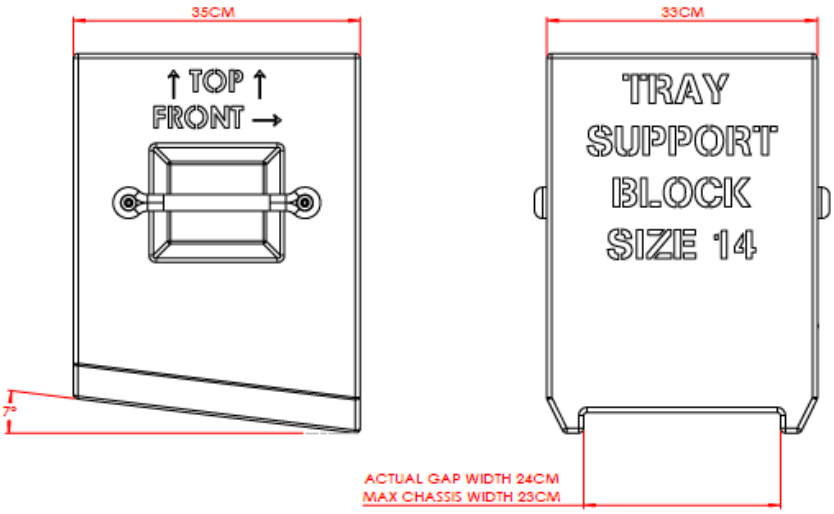
In this scenario the result = **load rating is 27,000kg per block**

EXAMPLE 2

Chassis rail contact
47.5cm x 36cm x 30kg = 51,300kg

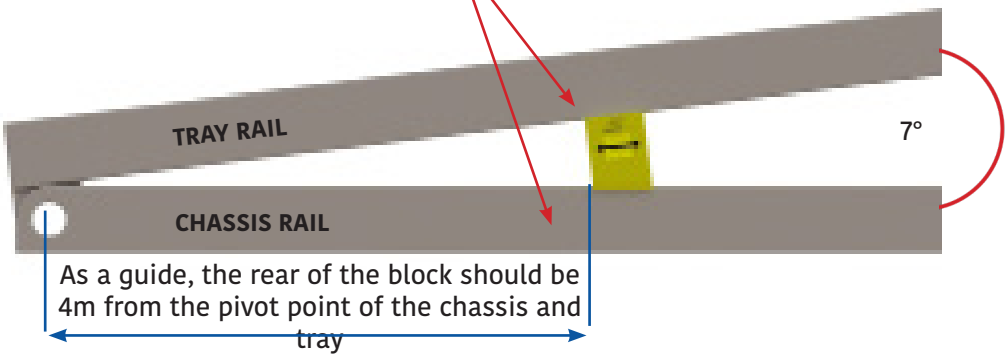
Tray rail contact
22cm x 36cm x 30kg = **23,760kg**

In this scenario the result = **load rating is 23,760kg per block**



Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact

As a guide, the angle between the chassis and tray should be 7°



Tray rail contact area

Chassis rail contact area

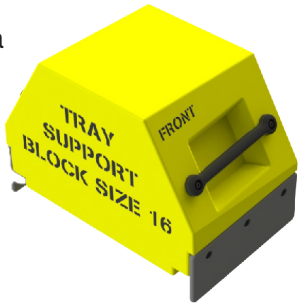
Note: The size 15 has been omitted intentionally

SET UP FOR TRAY SUPPORT BLOCK - SIZE 16

PART NO: NPR08531-00

Suits HITACHI EH4000
*refer note 1 on page 2

LOAD CALCULATION GUIDE



The load calculation is based on the minimum contact area between the tray support block and each rail surface. The rails need to be parallel to the block surfaces.

EXAMPLE 1

Chassis rail contact
37cm x 30cm x 30kg = 33,300kg

Tray rail contact
25cm x 30cm x 30kg = **22,500kg**

In this scenario the result = **load rating is 22,500kg per block**

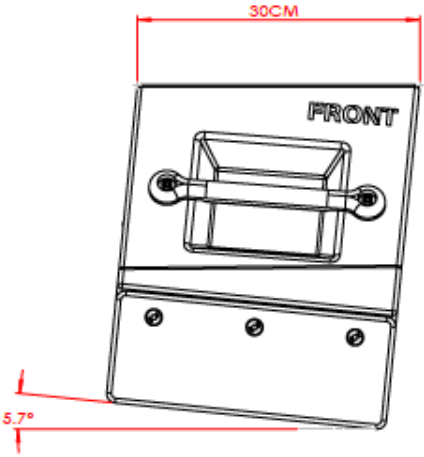
KG 15kg

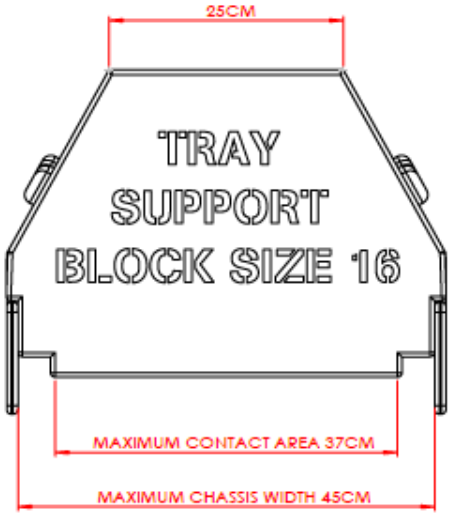
EXAMPLE 2

Chassis rail contact
24cm x 30cm x 30kg = 21,600kg

Tray rail contact
25cm x 30cm x 30kg = **25,500kg**

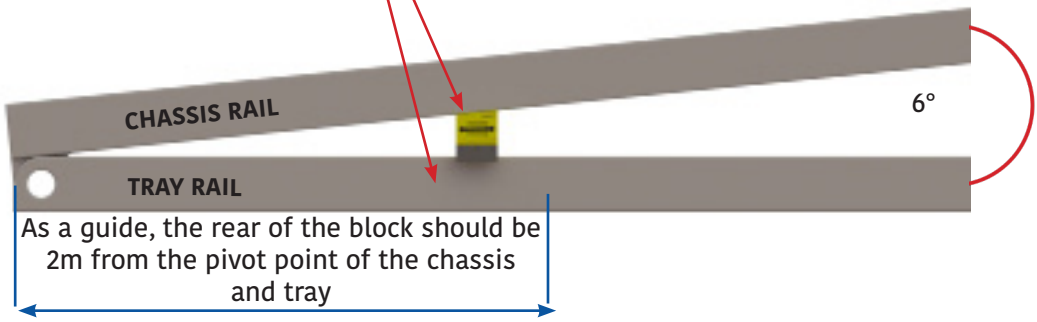
In this scenario the result = **load rating is 21,600kg per block**





Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact

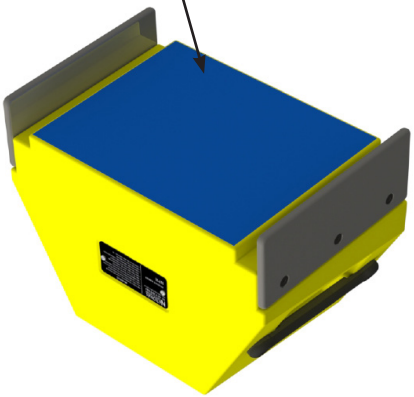
As a guide, the angle between the chassis and tray should be 6°



As a guide, the rear of the block should be 2m from the pivot point of the chassis and tray

Tray rail contact area

Chassis rail contact area



SET UP FOR TRAY SUPPORT BLOCK - SIZE 17
PART NO: NPR08584-00

Suits LEIBHERR T264
*refer note 1 on page 2

LOAD CALCULATION GUIDE

The load calculation is based on the minimum contact area between the tray support block and each rail surface.
The rails need to be parallel to the block surfaces.

KG 34kg

EXAMPLE 1
Chassis rail contact
30cm x 30cm x 30kg = 27,000kg

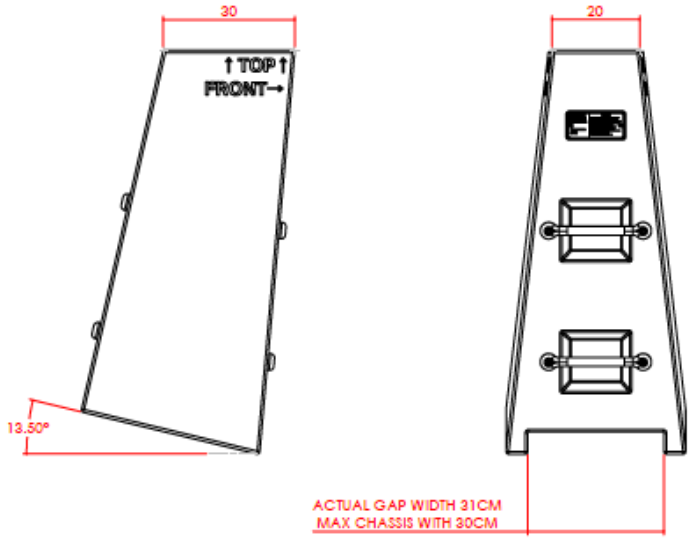
Tray rail contact
20cm x 30cm x 30kg = **18,000kg**

In this scenario the result = **load rating is 18,000kg per block**

EXAMPLE 2
Chassis rail contact
15cm x 30cm x 30kg = 13,500kg

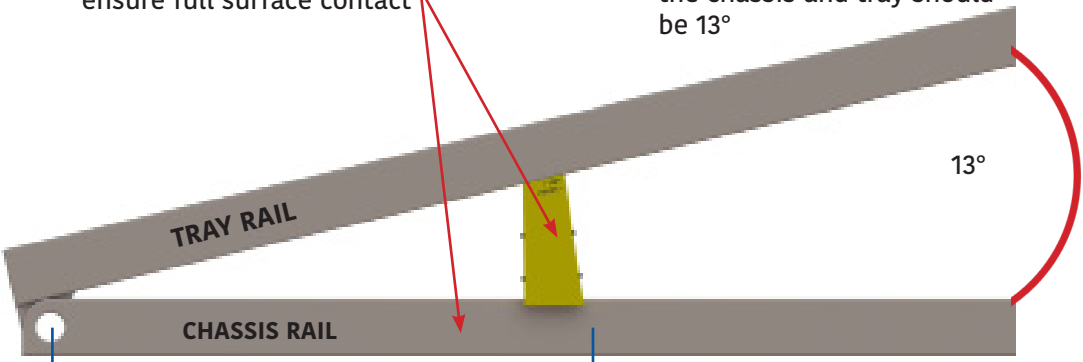
Tray rail contact
20cm x 30cm x 30kg = **13,500kg**

In this scenario the result = **load rating is 13,500kg per block**



Chassis and tray rails need to be parallel with surfaces of tray support block to ensure full surface contact

As a guide, the angle between the chassis and tray should be 13°



As a guide, the rear of the block should be 3.3m from the pivot point of the chassis and tray

Tray rail contact area

Chassis rail contact area

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All dimensions are indicative and may vary slightly from part to part.