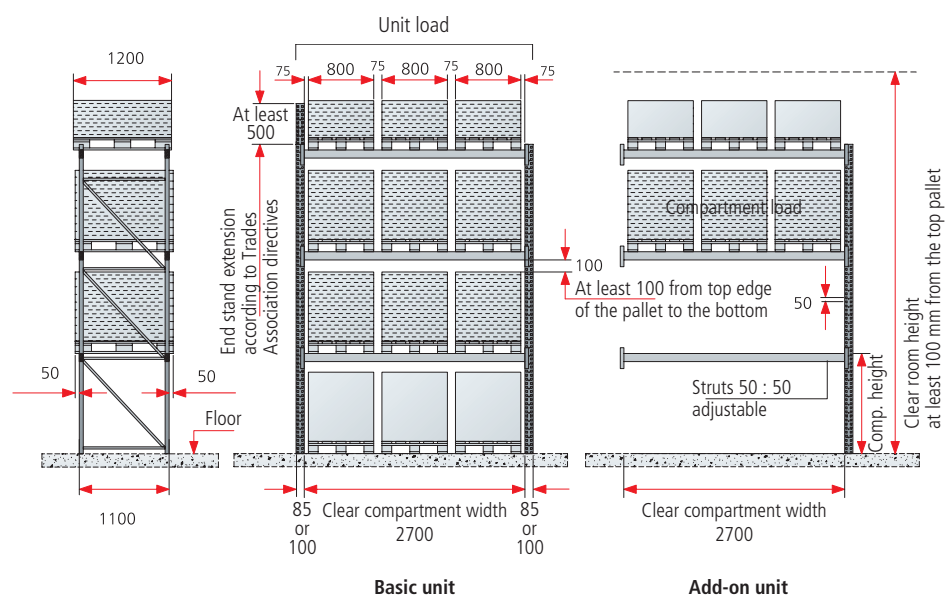




Pallet shelving systems

Efficient, orderly and sturdy

Pallet shelving systems are used for storing mainly palletised goods. Pallets and containers are arranged on top of or next to one another to save space. It is possible to assemble the elements into single shelf units as well as large systems according to existing space and inventory requirements. The pallet shelving systems are designed to provide virtually any required load capacity.



Planning note

Basic unit	Add-on unit
Stand 85/17 + 85/20: Nominal length + 170 mm	Stand 85/17 + 85/20: Nominal length + 85 mm
Stand 100/20: Nominal length + 200 mm	Stand 100/20: Nominal length + 100 mm

Selecting stands/struts

1. Determine the compartment load
2. Calculate the unit load from the sum of compartment loads
3. For selecting struts from stand type and compartment load, see page 921
4. For selecting the stand from unit load and compartment height, see page 920

The pallet shelving systems are the optimum solution for the efficient, orderly and flexible storage of pallets and piece goods.



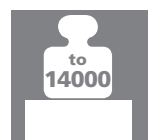
Shelving systems

Safety instructions

Load dimensions can exceed the nominal dimensions!

Control unit lifting height:
top edge of top strut + 200 mm.

The unit load specification refers to units which consist of one basic unit and at least three add-on units and have at least three strut pairs per unit.



Pallet shelving systems

Full packages



Planning dimensions and load specifications

Total width*:	Basic unit = Strut length + 170 mm Add-on unit = Strut length + 85 mm
Total depth:	= Frame depth
Unit load	to 7500 kg
Compartment load	to 2400 kg

* Specifications refer to the complete shelving systems on this double page.

Safety instructions

The unit loads apply to even distribution of load.
Additional compartment levels are possible up to the maximum unit load.

i Features

- Optimum solution for efficient, orderly and flexible pallet and piece goods storage
- Metal bracket height-adjustable in 50 mm increments
- Longitudinal and traverse storage possible
- Closed box sections ensure high stability
- Stands consisting of cold worked profiles which are bolted on the floor on-site
- The shelving system is a quality certified product according to RAL-RG 614/2 and bears the GS mark
- Static verification: based on DIN EN 15512

Full packages for pallet shelving systems 1500/2400 for light to medium-heavy loading

Storage levels plus floor storage level. Load specifications for compartment height 1000 mm.

Specification: stand galvanised. Struts plastic coated, RAL 2001 red orange.

2700 mm

Height mm	Depth mm	Number of shelves	Strut profile	Compartment load 	Unit load 	Basic unit		Add-on unit	
						Art. no.		Art. no.	
2700	800	2	85/15	1500	3700	287.912.000		287.930.000	
2700	1100	2	85/15	1500	3700	287.913.000		287.931.000	
3300	800	2	85/15	1500	3700	287.918.000		287.936.000	
3300	1100	2	85/15	1500	3700	287.919.000		287.937.000	
4400	800	3	85/15	1500	5500	287.924.000		287.942.000	
4400	1100	3	85/15	1500	5500	287.925.000		287.943.000	
2700	800	2	100/20	2400	5800	287.914.000		287.932.000	
2700	1100	2	100/20	2400	5800	287.915.000		287.933.000	
3300	800	2	100/20	2400	5800	287.920.000		287.938.000	
3300	1100	2	100/20	2400	5800	287.921.000		287.939.000	
4400	800	3	100/20	2400	7500	287.926.000		287.944.000	
4400	1100	3	100/20	2400	7500	287.927.000		287.945.000	

Full packages for pallet shelving systems /2200 for light to medium-heavy loading

Storage levels plus floor storage level. Load specifications for compartment height 1000 mm.

Specification: stand galvanised. Struts plastic coated, RAL 2001 red orange.

1800 mm

Height mm	Depth mm	Number of shelves	Strut profile	Compartment load 	Unit load 	Basic unit		Add-on unit	
						Art. no.		Art. no.	
2700	800	2	85/15	2200	6650	287.910.000		287.928.000	
2700	1100	2	85/15	2200	6650	287.911.000		287.929.000	
3300	800	2	85/15	2200	6650	287.916.000		287.934.000	
3300	1100	2	85/15	2200	6650	287.917.000		287.935.000	
4400	800	3	85/15	2200	7500	287.922.000		287.940.000	
4400	1100	3	85/15	2200	7500	287.923.000		287.941.000	



Pallet shelving systems

Shelving component parts

Stands



Stand, disassembled

Specification: cold worked profiles which are bolted on the floor, galvanised.

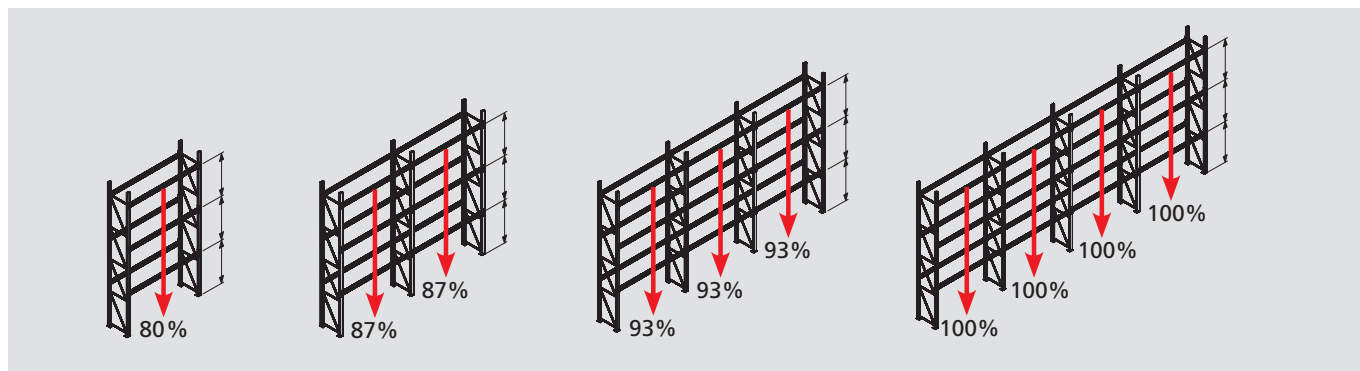
Stand 85/17

Stand 85/20

Stand 100/20

Height mm	Depth 800 mm.		Depth 1100 mm.		Depth 800 mm.		Depth 1100 mm.		Depth 800 mm.		Depth 1100 mm.	
	Art. no.		Art. no.		Art. no.		Art. no.		Art. no.		Art. no.	
2200	287.966.000		287.969.000		287.500.000		287.507.000		287.972.000		287.979.000	
2700	287.528.000		287.532.000		287.501.000		287.508.000		287.973.000		287.980.000	
3300	287.529.000		287.533.000		287.502.000		287.509.000		287.974.000		287.981.000	
3800	287.967.000		287.970.000		287.503.000		287.510.000		287.975.000		287.982.000	
4400	287.530.000		287.534.000		287.504.000		287.511.000		287.976.000		287.983.000	
4900	287.968.000		287.971.000		287.505.000		287.512.000		287.977.000		287.984.000	
5500	287.531.000		287.535.000		287.506.000		287.513.000		287.978.000		287.985.000	

Unit loads



Unit loads		Compartment width ≤ 2700 mm						Compartment width > 2700 ≤ 3600 mm		
Stand type	Compartment height mm	Strut profiles						Strut profiles		
		85/15 kg	85/20 kg	100/20 kg	120/20 kg	140/15 kg	155/17 kg	120/20 kg	140/15 kg	155/17 kg
SR 85/17	1000	7300	7260	7310	7330	-	-	-	-	-
	1500	6740	6710	6780	6800	-	-	-	-	-
	2000	6310	6290	6410	6450	-	-	-	-	-
SR 85/20	1000	11410	11830	11900	12230	12190	12140	11000	11310	11310
	1500	7180	9800	9950	10390	10700	10670	9420	10120	10150
	2000	5280	7930	8440	9120	9300	9270	7200	8580	9120
SR 100/20	1000	13120	13600	13680	14060	14010	13850	12600	13000	13000
	1500	8870	12100	12280	12820	13210	13170	11630	12490	12500
	2000	6950	10430	11100	12000	12230	12200	10600	11580	12000

The stand loads refer to shelving systems with a maximum height of 8 metres (top strut) to 12 m on request. The loads refer to shelving systems with:

■ at least 4 units ■ at least 3 strut levels ■ evenly distributed load ■ a compartment width ≤ 2700 mm or > 2700 mm and ≤ 3600 mm.

For compartment widths greater than 2700 at least one strut HN 120-20 must be used! The unit loads decrease with smaller strut cross sections with these compartment widths. In this case, please consult us. The unit loads depend on the stand/strut combination. Please request exact specifications for your project.

Higher unit loads up to 25 t with stand type 120/25 on request!



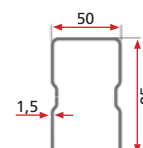
Struts

Struts

The specified loads of the respective stand types are maximum loads (kg) per strut pair with a compartment height of 1500 mm.
The maximum unit loads may vary depending on the assembled shelving system. Specification: plastic coated, RAL 2001 red orange.

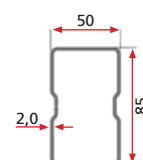
Struts HN 85/15

Width mm	85/17 	85/20 	100/20 	Art. no.	
1800	2200	2250	2300	287.536.000	
2200	1900	1950	2000	287.537.000	
2700	1500	1550	1600	287.538.000	



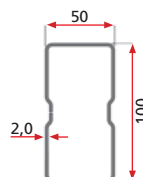
Struts HN 85/20

Width mm	85/17 	85/20 	100/20 	Art. no.	
1800	2650	2700	2750	287.539.000	
2200	2250	2300	2300	287.540.000	
2700	1700	1750	1800	287.541.000	



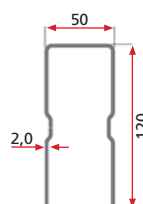
Struts HN 100/20

Width mm	85/17 	85/20 	100/20 	Art. no.	
1800	3300	3350	3400	287.542.000	
2700	2400	2400	2450	287.543.000	



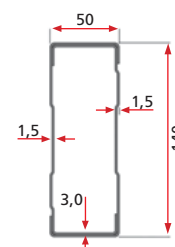
Struts HN 120/20

Width mm	85/17 	85/20 	100/20 	Art. no.	
1800	4000	4100	4150	287.544.000	
2200	3400	3500	3500	287.545.000	
2700	2900	3000	3000	287.546.000	
3300	2450	2500	2500	287.547.000	
3600	2100	2150	2200	287.548.000	



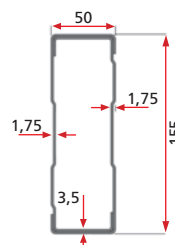
Struts HN 140/15

Width mm	85/17 	85/20 	100/20 	Art. no.	
2700	3700	4050	4400	287.960.000	
3300	3000	3400	3750	287.961.000	
3600	2750	3100	3450	287.962.000	



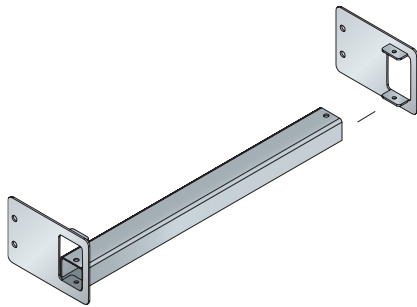
Struts HN 155/17

Width mm	85/17 	85/20 	100/20 	Art. no.	
2700	-	5250	5500	287.963.000	
3300	-	4350	4700	287.964.000	
3600	-	4000	4350	287.965.000	



Pallet shelving systems

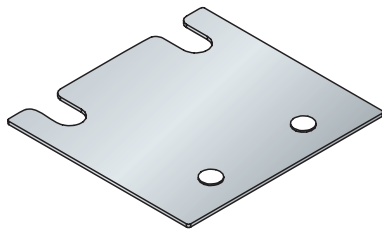
Shelving accessories



Safety stop for pallet shelving, lightweight specification

For 50 mm pallet overhang. Surface galvanised or painted in RAL 2001 red orange.

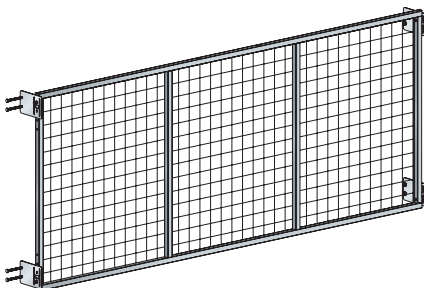
Length mm	Specification	For SR 85 / 17 + 85 / 20		For SR 100 / 20	
		Art. no.		Art. no.	
1800	Galvanised	287.648.000		287.946.000	
2200	Galvanised	287.650.000		287.947.000	
2700	Galvanised	287.652.000		287.948.000	
3300	Galvanised	287.654.000		287.949.000	
3600	Galvanised	287.656.000		287.950.000	
1800	Painted, RAL 2001	287.649.000		287.951.000	
2200	Painted, RAL 2001	287.651.000		287.952.000	
2700	Painted, RAL 2001	287.653.000		287.953.000	
3300	Painted, RAL 2001	287.655.000		287.954.000	
3600	Painted, RAL 2001	287.657.000		287.955.000	



Shims

To level out uneven spots in the floor.

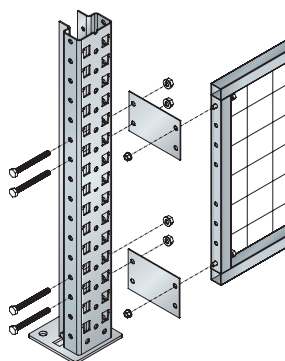
Height mm	Specification	Art. no.	
1	Galvanised	287.956.000	
2	Galvanised	287.957.000	



Rear gratings

According to the BGR 234 guidelines (occupational safety regulations), shelving systems must be secured with rear gratings to prevent inventory items from falling down; this applies to traffic ways and work areas. Surface plastic coated in RAL 5010 gentian blue, without fastening accessories.

Length mm	Height mm	Specification	Art. no.	
1800	500	Plastic coated	287.636.000	
2200	500	Plastic coated	287.637.000	
2700	500	Plastic coated	287.638.000	
3300	500	Plastic coated	287.639.000	
3600	500	Plastic coated	287.640.000	
1800	1100	Plastic coated	287.641.000	
2200	1100	Plastic coated	287.642.000	
2700	1100	Plastic coated	287.643.000	
3300	1100	Plastic coated	287.644.000	
3600	1100	Plastic coated	287.645.000	



Fastening sets for rear gratings

1 set per rear grating. Surface galvanised.

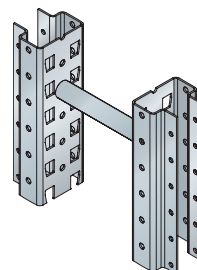
Fastening set with	Art. no.	
Pallet overhang 50 mm for stand type 85 / 17 and 85 / 20	287.646.000	
Pallet overhang 50 mm for stand type 100 / 20	287.958.000	
Pallet overhang 100 mm for stand type 85 / 17 and 85 / 20	287.647.000	
Pallet overhang 100 mm for stand type 100 / 20	287.959.000	



Spacers

Required for set-up of double shelving systems.

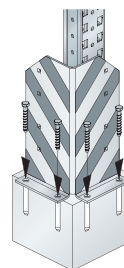
Length mm	Specification	Art. no.	
100	Galvanised	287.593.000	
200	Galvanised	287.594.000	



Upright guard

Protects shelving uprights at entrances and passages, in compliance with FEM requirements, complete with 4 screw anchors.

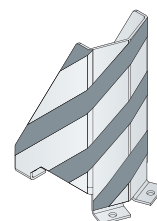
Height mm	Specification	Art. no.	
400	Signal colour black/yellow	287.597.000	



U-shaped upright guard

Protects shelving uprights, complete with screw anchors.

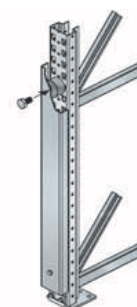
Height mm	Specification	Art. no.	
400	Signal colours black/yellow	286.000.000	



Upright protection

With rubber buffer, complete with assembly accessories. Surface painted in RAL 5010 gentian blue. Protects the lower area of the stand uprights against industrial truck damage.

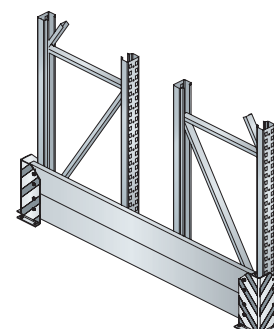
Stand width mm	Height mm	Art. no.	
85	970	287.598.000	
100	970	287.599.000	



Guard panel for shelving fronts

Upright guard in signal colours black/yellow, complete with assembly accessories, protects shelving fronts. Height 400 mm.

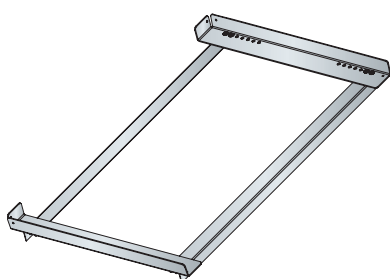
Specification	Art. no.	
For single shelf unit 800	287.600.000	
For single shelf unit 1100	287.601.000	
For double shelf unit 800 + spacer 200	287.602.000	
For double shelf unit 1100 + spacer 200	287.603.000	



Pallet shelving systems

Shelving accessories

Angle and depth supports



Lightweight angle support

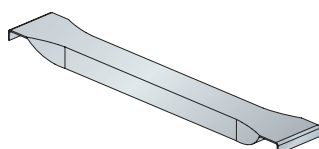
With side and rear raised edges as safety stop, supplied disassembled.
Load 250 kg (per pair). Surface galvanised or painted in RAL 2001 red orange.

Shelving depth mm	Specification	Art. no.	
800	Galvanised	287.585.000	
1100	Galvanised	287.586.000	
800	Painted, RAL 2001	287.587.000	
1100	Painted, RAL 2001	287.588.000	

Heavy angle support

With side and rear raised edges as safety stop, supplied disassembled.
Load 1150 kg (per pair). Surface galvanised or painted in RAL 2001 red orange.

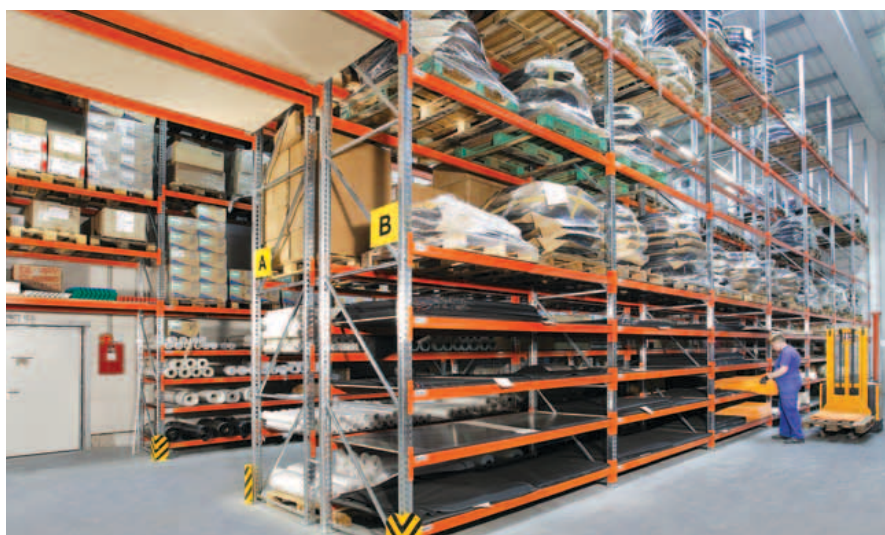
Shelving depth mm	Specification	Art. no.	
800	Galvanised	287.589.000	
1100	Galvanised	287.590.000	
800	Painted, RAL 2001	287.591.000	
1100	Painted, RAL 2001	287.592.000	



Lightweight depth support

Required for traverse storage of Euro pallets.
Load capacity per pair. Price per piece. Surface galvanised or painted in RAL 2001 red orange.

Depth mm	Specification	 kg	Art. no.	
800	Galvanised	1100	287.553.000	
1100	Galvanised	1100	287.554.000	
800	Painted, RAL 2001	1100	287.555.000	
1100	Painted, RAL 2001	1100	287.556.000	

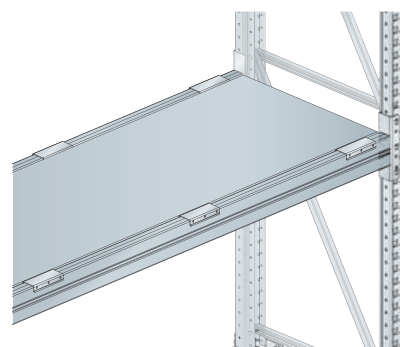


Shelves

Chipboard shelf with stepped depth support, without struts

Chipboard 38 mm, the chipboard top edge is flush with the strut top edge, to prevent damage to chipboard during storage and retrieval. Compartment load increase per additional depth support = 600 kg, depth support RAL 2001 red orange.

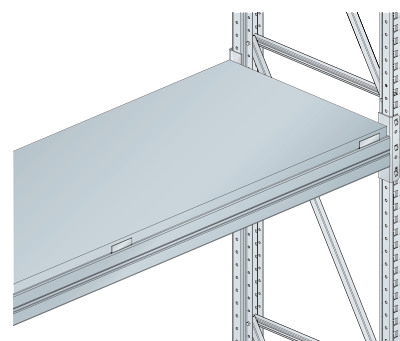
Compartment width mm	Compartment depth mm	Compartment load kg	Number of supports	Art. no.	
1800	800	1220	3	287.575.000	
2200	800	1020	3	287.576.000	
2700	800	1710	4	287.577.000	
3300	800	1410	4	287.578.000	
3600	800	2440	6	287.579.000	
1800	1100	1680	3	287.580.000	
2200	1100	1400	3	287.581.000	
2700	1100	2360	4	287.582.000	
3300	1100	2020	4	287.583.000	
3600	1100	3360	6	287.584.000	



Chipboard shelf complete with centring plate, without struts

Chipboard shelf 38 mm, natural surface, complete with centring plate placed on the strut. For protection in passages/alleys – according to BGR 234 directive. For use in picking areas, carton and box storage.

Compartment width mm	Compartment depth mm	Compartment load kg	Art. no.	
1800	800	1406	287.626.000	
2200	800	1718	287.627.000	
2700	800	2109	287.628.000	
3300	800	2577	287.629.000	
3600	800	2811	287.630.000	
1800	1100	706	287.631.000	
2200	1100	863	287.632.000	
2700	1100	1059	287.633.000	
3300	1100	1295	287.634.000	
3600	1100	1413	287.635.000	



Wire mesh shelf, without struts

Mesh size 30 x 30 mm, support rod 30 x 2 mm. Especially suited for holding high stationary loads, can also be used in conjunction with sprinkler systems. Surface hot-dip galvanised.

Compartment width mm	Compartment depth mm	Compartment load kg	Art. no.	
1800	800	2500	287.606.000	
2200	800	3060	287.607.000	
2700	800	3750	287.608.000	
3300	800	4500	287.609.000	
3600	800	4500	287.610.000	
1800	1100	1680	287.611.000	
2200	1100	2050	287.612.000	
2700	1100	2520	287.613.000	
3300	1100	3080	287.614.000	
3600	1100	3360	287.615.000	

