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EQUIPMENT FOR RABBITS, FERRETS AND GUINEA PIGS



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ISO-9001 - Cert. n° 0875



ISO-14001 - Cert. n° 0256A/0



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TECNIPLAST
*innovation through passion*SM

MULTIFLOOR PEN SYSTEM

Cages

“X” type cage = 4200 cm² area

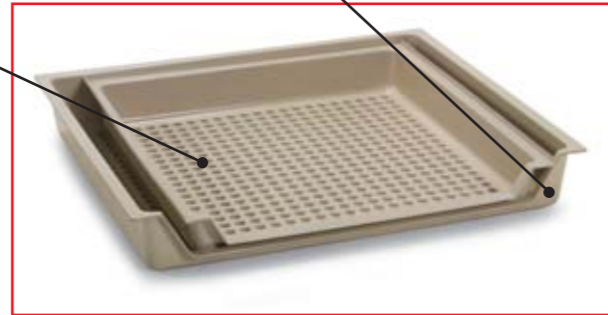
“P” type cage = 5400 cm² area

“X” type cage:

Cat. N. 4421X009
Cage Sizes: mm 716 x 716 x 114 h
Cage Area: mm 653 x 653 x 95 h
Kg 2.8 for the “X” type cage

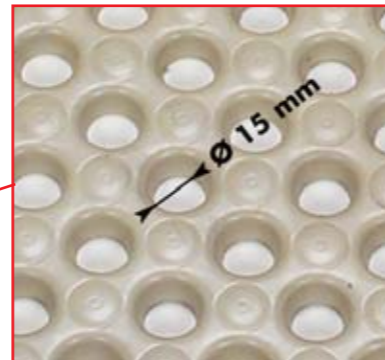
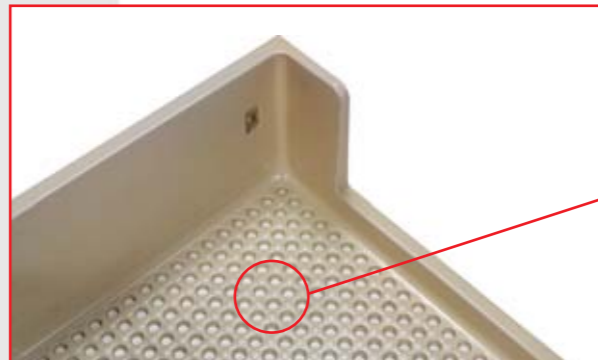
Tray:

Cat. N. 4401S389 for “X” type cage
Tray Sizes: mm 716 x 716 x 46 h
Tray Area: mm 656 x 656 x 38 h
Kg 2.4 for the “X” type cage



The cages are made of EN130S Noryl® and easily stackable. (NORYL is a registered trademark of the General Electric Company).

Multifloor pen system rabbit cages are provided with a smooth, perforated floor with rounded corners that provides a warm, quiet surface and cuts out the risk of sore animal hocks.



Safe identification of batch.

Minimum floor area* (cm ²)	Complete Rack Unit Cat. N.	Complete Rack Unit Autowatering System Cat. N.	N. of Cages	Internal height (cm)	Overall Rack Dimensions (mm) W x L x H
4200	4X03B700CP	4X03B701CP	3	45	785 x 840 x 1840
	4X06B700CP	4X06B701CP	6	45	1550 x 840 x 1840

*The body weight of rabbits kept in this type of housing is to be 3-5 Kg.
Minimum height 45 cm.

Rack (Cat. N.4X03B700CP)

Stainless steel rack unit, tubular design.
Removable and electro-polished door with urine deflector and welded horizontal cardholder.



All Tecniplast racks are supplied with S/S castors, two of which are braked.
All units also feature a unique quick safe opening/closing system for easy access to the animals.



S/S Feeder (Cat. N. 4401S960)



All racks can be easily connected by rotating the hook 45°.

It is preferable for cages to be rectangular. A raised area should be provided within the cage. This shelf should allow the animal to lie and sit on and easily move underneath and it should not cover more than 40% of the floor space. While the cage height should be sufficient for the rabbit to sit upright without its ears touching the roof of the cage, this degree of clearance is not considered necessary for the raised area.

In floor pens for group housing, visual barriers and structures to provide refuges and look out behaviour should be provided.

The symmetrical raised shelf may be easily shifted from the left to the right side of the cage, or completely removed, according to needs. It can be rotated to an upright position and locked.



The raised shelf features an innovative hooking system with auto-rotation: when the cage is removed and replaced there is no need to take out or lift the raised shelf.

Nesting box code 4AC608X1/P1.

"P" type cage = 5400 cm²



Cat. N. 4541P009
Tray Sizes: mm 870 x 740 x 130 h
Cage Area: mm 797 x 679 x 112 h
Kg 3.8 for the "P" type cage

Tray



Cat. N. 4501K389 for "P" type cage
Tray Sizes: mm 866 x 786 x 46 h
Cage Area: mm 800 x 720 x 40 h
Kg 3.6 for the "P" type tray



Rack (Cat. N.4P02B700CP)

European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes CETS No.: 123

Revision of Appendix A (GT123 (2000) 57 Rodents - Rabbits)

Cages and pens for rabbits > 10 weeks of age

The final body weight kg that any rabbit will reach in this housing	Minimum floor area for one or two socially harmonious animals cm ²	Minimum height cm
<3	3500	45
3-5	4200	45
>5	5400	60

(A raised area must be provided for every single cage or for every group of multifloor pen system cages. Pens should contain structures that subdivide the space to allow animals to initiate or avoid social contact. The additional floor area is 3000 cm² per rabbit for the third, the fourth, the fifth and the sixth rabbit, while 2500 cm² must be added for each additional rabbit above a number of six).

Recommended shelf dimensions for rabbit cages

Final Body Weight (Kg)	Approximate Size (cm x cm)	Approximate Height Above Cage Floor (cm)
<3	55 x 25	25
3-5	55 x 30	25
>5	60 x 35	30

NOTE: all Tecniplast Pen Systems comply with the above.

To allow proper use of the shelf and of the cage as a whole the approximate shelf size is an optimum with minima and maxima very close (+/- 5-10%).

Minimum floor area* (cm ²)	Complete Rack Unit Cat. N.	Complete Rack Unit Autowatering System Cat. N.	N. of Cages	Internal height (cm)	Overall Rack Dimensions (mm) W x L x H
5400	4P02B700CP	4P02B701CP	2	60	940 x 850 x 1700

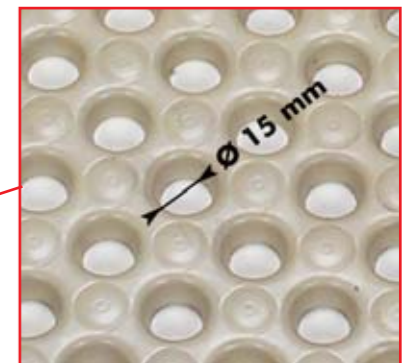
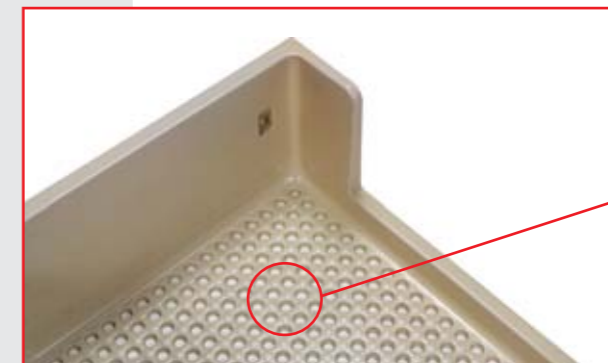
*This type of housing is designed for rabbits with a final body weight in excess of 5 Kg.

Minimum height 60 cm.

Multifloor pen system rabbit cages are provided with a smooth, perforated floor with rounded corners that provides a warm, quiet surface and cuts out the risk of sore animal hocks.



Safe identification of batch.



FERRET CAGE

The FERRET CAGE is positioned on a two-floor rack (5400 cm² cages and 60 cm inside height) and it is designed to house ferrets in the best environmental conditions, in compliance with the current norms.

Cages

- Smooth, rounded-angled, solid floor provides a warm and quiet surface and eliminates the risk of sore animal hocks.
- The cages are made of EN130S Noryl® and easily stackable. (NORYL is a registered trademark of the General Electric Company).

Cage Dimensions*
 Cat. N. 4541P008
 Cage Sizes: mm 870 x 740 x 130 h
 Cage Area: mm 797 x 679 x 122 h (area 5400 cm²)
 Kg 3,8 for the "P" type cage
 Kg 3,8 for the "P" type tray

*In compliance with the report for the revision of the Council of Europe Convention ETS 123.

The raised shelf features an innovative hooking system with auto-rotation: when the cage is removed and replaced there is no need to take off or lift the raised shelf.



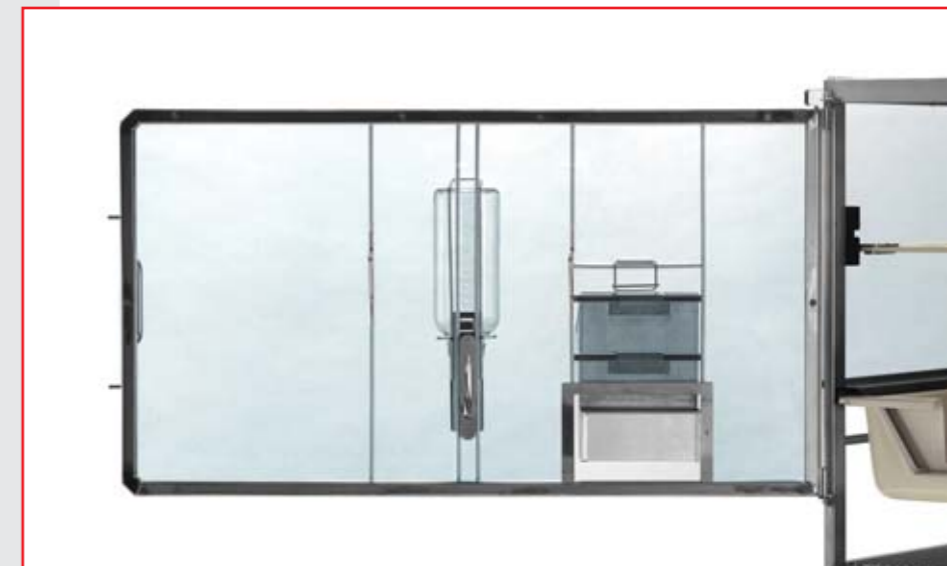
Extractable PVC tube with rigid framework to link the two cages allowing the animal to move from one cage to the other. Ø100mm
 Closing plate for the housing of the PVC tube (when cages must not be linked together).



S/S Feeder (Cat. N. 4401S960)

Microperforated area. It reduces problems caused by dust and pallet food.

Frontal transparent polycarbonate gate with a S/S tubular frame with S/S with separators placed around the openings of the feeder and water bottle support.



Rack

- Stainless steel rack unit with tubular design.
- Ferret Hammock NOT included.
- All racks can be easily connected with a hook.
- All Tecniplast racks units are supplied with S/S castors, two of which are braked.
- All units also feature our unique quick safe opening/closing system for easy access to cage occupants.

Complete Rack Unit Cat. N.	4P02B700FT
N. of Cages	2
Internal height (cm)	60
Overall Rack Dimensions (mm) W x L x H	940 x 845 (+160) x 1700

PLASTIC GUINEA PIG CAGES

Cages

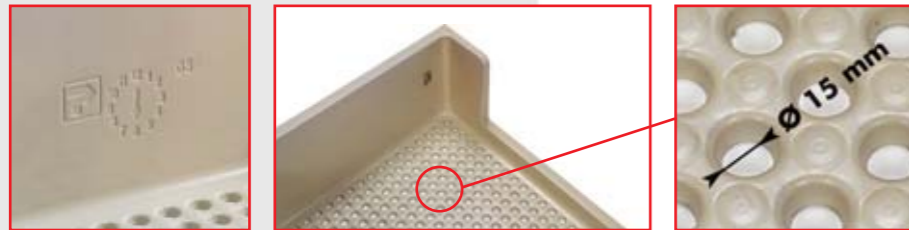
"W" type cage = 4000 cm² area

Cat. N. 3020W009 (Perforated Base)
Cage Sizes: mm 814 x 610 x 260 h
Cage Area: mm 743 x 543 x 250 h
Kg 4,3 for the "W" type cage



The cages are made of EN130S Noryl® and easily stackable.
(NORYL is a registered trademark of the General Electric Company).

Plastic Guinea Pig cages are provided with a smooth, perforated floor with rounded corners that provides a warm, quiet surface and cuts out the risk of sore animal hocks.



Report for the revision of the Council of Europe Convention ETS 123
Appendix A for rodents and rabbits
Guinea Pigs in stock, during procedures and breeding

Cat. N. 3020W389
Tray Sizes: mm 809 x 609 x 46 h
Tray Area: mm 749 x 549 x 40 h
Kg 2,4 for the "W" type cage



Cat. N. 3020W008 (Solid Base)
Cage Sizes: mm 814 x 610 x 260 h
Cage Area: mm 743 x 543 x 260 h
Kg 4,3 for the "W" type cage



	Body Weight (g)	Minimum Floor Area (cm ²)	Minimum Cage Height (cm)	Floor Area per Animal (cm ²)
In Stock and During Procedure	= 200	1800	23	200
	201-300	1800	23	350
	301-450	1800	23	500
	451-700	2500	23	700
	> 700	2500	23	900
Breeding		2500 Pair with litter. (For each additional breeding female add 1000 cm ²)	23	



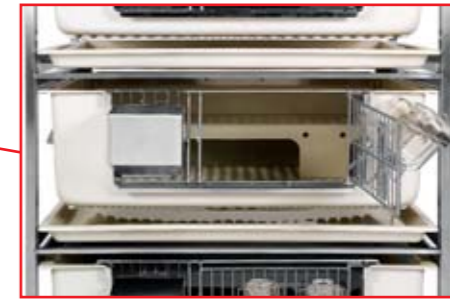
Cat. N. 3020W202

The front gate comes complete with an S/S plate cat. 3020W202 (preventing the animals, while romping, from kicking the bedding out of the cage) for solid base cages (there is no plate for cages with a perforated base).



Rack (CAT. N. 3W04B200)

Stainless steel rack unit, tubular design.
All Tecniplast racks are supplied with S/S castors, two of which are braked.



Removable and electro-polished S/S front gate mounted directly on the cage with door featuring a welded horizontal cardholder.
S/S front gate with door allows the operator to easily access the animals inside the cage without needing to remove the cage itself.

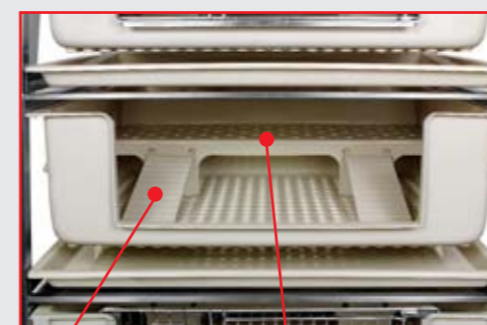
Cages with solid base (Cat. N. 3020W008)

Complete Rack Unit Cat. N.	Complete Rack Unit Autowatering System Cat. N.	N. of Cages	Internal height (cm)	Overall Rack Dimensions (mm) W x L x H
3W05B100CP	3W05B102CP	5	28	860 x 790 x 1700
3W10B100CP	3W10B102CP	10	28	1700 x 790 x 1700

Cages with perforated base (Cat. N. 3020W009)

Complete Rack Unit Cat. N.	Complete Rack Unit Autowatering System Cat. N.	N. of Cages	Internal height (cm)	Overall Rack Dimensions (mm) W x L x H
3W04B200CP	3W04B202CP	4	28	860 x 790 x 1700
3W08B200CP	3W08B202CP	8	28	1700 x 790 x 1700

The raised shelf is easily removable from the cage.



Noryl Ramp Cat. N. 3020W611 Raised Shelf Cat. N. 3020W610



Cat. N. 3020W960

S/S feeder features a plate to prevent the animals from entering and to reduce food spillage.

The number of bottles mounted on the gate and their capacity depend on the cage type.

PHYSICAL PROPERTIES OF NORYL®

Thermal properties

Material	Code	Suggested autoclaving Temp. °C	HDT °C ⁽¹⁾	Water Absorption ⁽²⁾	Transparency	Rigidity	Sterilisation ⁽³⁾				
							Autoclave	Radiation	Gas	Dry-Heat	Disinfection
Noryl®	PPO	121	137	0,07	Opaque	Rigid	Yes	Yes	Yes	No	Yes

Chemical Resistance

Chemical Resistance Classification:

- **E=Excellent** 30 days of constant exposure cause no damage. Plastic may even resist for years.
- **G=Good** Little or no damage after 30 days of constant exposure to the reagent.
- **F=Fair** Some effect after 7 days of constant exposure to the reagent.
- **N=Not Recommended** Not for continuous use. Immediate damage may occur. The effect will be a more severe crazing, cracking, loss of strength, discolouration, deformation.

This Chemical Resistance Summary Chart is a general guide only. As so many factors can affect the chemical properties of a given product, you should test under your own conditions. If any doubt exists about specific applications of TECNIPLAST products, please contact TECNIPLAST Technical Service.

Classes of Substance at 20°C	Noryl® PPO
Acids, diluted or weak	F
Acids, conc. and strong	F/N
Alcohol, aliphatic	G
Acetone	N
Urine	E
Esters	G
Hydrocarbons, aliphatic	F/N
Hydrocarbons, aromatic	N
Hydrocarbons, halogenated	N
Alkalins	G
Hydrogen Peroxide	G

- (1) Heat Deflection Temperature is the temperature at which a bar of the thermoplastic will deflect 0.01" under 66 psi. Due to stress influences, rigid plastics should NOT be exposed to such heat levels.
- (2) Water absorption: the % of water absorbed by a 3.175 mm sample over 24 hours exposure.
- (3) Sterilisation:
 - Autoclaving: 121°C for 20 minutes - clean and rinse items with softened water before autoclaving. Certain chemicals which have no appreciable effect on plastics at room temperature may cause deterioration at

- autoclaving temperatures unless removed with softened water before.
- Gas: Ethylene Oxide, Formaldehyde, Hydrogen Peroxide.
 - Dry Heat: 160°C for 120 minutes.
 - Radiation: gamma irradiation at 25 kGy (2.5 Mrad) with non-stabilised plastic;
 - Disinfectants: Benzalkonium Chloride, Formalin, Formaldehyde.

WASHING, AUTOCLAVING AND DISINFECTION GUIDELINES

A. Washing

- 1 55°C is the optimum temperature at which to wash plastic cages (60°C max). Higher temperatures (80 to 85°C) may be used for short contact periods to neutralise and rinse cages.
- 2 Alkaline detergents are more effective in the removal of organic residues from surfaces and as such they are the choice for machine washing of animal cages. Regular checks should be made to ensure that any water remaining on cages is either neutral or slightly acidic.
- 3 Acid detergents can be used where urine or hard water scaling is a problem without the need to neutralise them but they are generally less effective in removing organic soiling.
- 4 Rinse aids used to speed up the drying of the cage surfaces should be avoided. Consult the manufacturer of your cage washer in order to establish that the cycle programmes being used are correct for the care of plastic materials. There should be a gradual increase in temperature during the wash cycle rather than exposing the cages to thermal shock.

B. Autoclaving

- 1 Although considered autoclavable, PPO parts will gradually weaken and change colour after repeated autoclaving. We recommend autoclaving of PPO parts only when necessary.
- 2 If cages are washed prior to autoclaving, it is important to be certain there are no detergent and rinse aids residues on the surface because the extreme heat and pressure of the autoclave will cause the residue to be baked on, causing change in colour or chemical damage of the plastic surface.
- 4 Use as short an autoclave cycle as possible. Maximum exposure of 20 minutes at 121°C is recommended. Take care to avoid cycles which incorporate thermal pulsing.
- 5 Do not stack more than 5 cage bodies.

C. Disinfection

- 1 Check with the disinfectant manufacturer regarding the use of their product on plastic cages.

Stainless Steel

TECNIPLAST use the highest quality certified Stainless Steel. When properly cared for, Stainless Steel is less likely to discolour, rust or corrode than other type of Steel. SS products that are washed with detergents must be thoroughly rinsed and dried to prevent discolouration.

AISI 304

Stainless Steel - EURONORM - UNI - X5CrNi1810
Applications: lids, racks, card holders and wire work.

AISI 316

Stainless Steel - EURONORM - UNI - X5CrMo17122
Applications: bottle caps, valves and accessories for autowatering systems.