

## **Safety for Garage Doors**

to European Standard EN 12604 in force since 1.11.2000

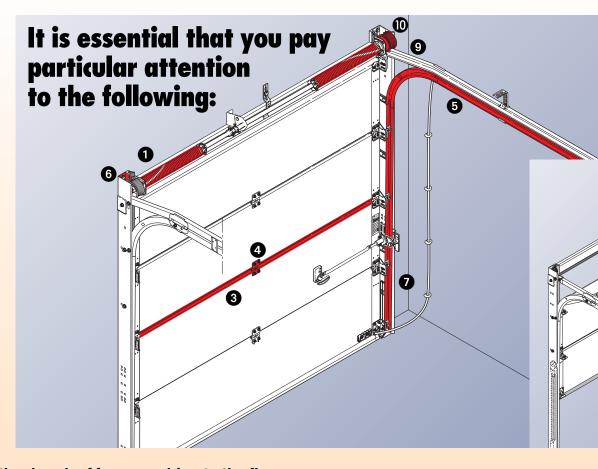




### **New European Standard EN 12604**

### Hörmann garage doors meet all the safety requirements!

For the first time there is now a European Standard regulating the safety requirements for manually and power-operated doors! The European Standard EN 12604 is effective for garage doors which are put into operation from 1.11.2000. See for yourself how Hörmann meets these safety requirements.



#### Safeguard to prevent the door leaf from crashing to the floor



with spring failure safety device offered as a standard feature only from Hörmann

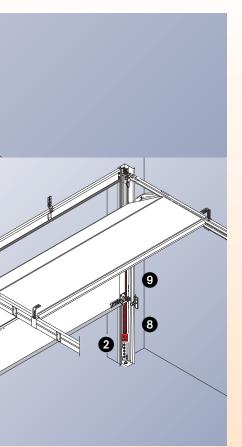
Hörmann are the only sectional doors to feature two torsion springs and integral spring failure safety devices. Even if a spring should break, the door will not crash to the floor. EN 12604 ).

Hörmann's integral spring safety device brings the door to a halt after approx. 30 - 70 mm and as such falls well within the Standard which requires arrest of the door after a maximum free movement of 300 mm. (FIX 12604 ).



Play it safe: With Hörmann the standard spring safety device protects you at all times EN 12604

2



### **EN 12604** Protection against crushing, cutting, shearing and getting caught up



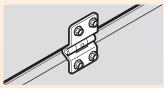




3 Finger-trap protection both inside and outside

Since 1992 Hörmann Sectional Doors have offered the well known and patented finger-trap protection. The door sections are shaped in such a way that the gap between the individual door sections is never greater than 4 mm.

And it goes without saying that Hörmann Sectional Doors offer finger-trap protection in the region of the wicket door too!



4 Trap protection right through to the last detail Nothing can get trapped in





the hinges either!



The safety tracks are designed in such a way that it is impossible for the rollers to leave the tracks. (FIN 12604 ).

6 Side trap protection

The side frames are completely enclosed, therefore making it impossible to reach in between the door leaf and frame. Your fingers will thank you for it!



2 Anti-fall safeguard also with tension spring system

The single or double spring-inspring system (2 or 4 springs) and the double steel cable arrangement on each side hold the door leaf of EcoClassic / EcoTherm doors up to 3 m wide safely in position. If a spring should break or a cable snap, simply an admissible imbalance of less than 200 N at the main closing edge is produced.



7 Concealed cable guidance

Protruding components can pose injury hazards. That's why on Hörmann doors the cables are guided internally between the door leaf and the frame. Think about the unsuspecting, playful nature of children! (ISS EN 12604 ).



#### **EN 12604** Safe and high-grade carrying devices

8 The spring-in-spring system on doors featuring tension spring technology ensures that a broken spring cannot be catapulted into the air and possibly cause someone injury. (PEN 12604 ).

9 The steel wire cables have the required safety factor of 6. (EN 12604).

10 In the door's end-of-travel position all the cable drums still have 2 complete safety windings. (Fig. 12604).

(FIN 12604 ).

### **Check list for sectional doors**

## with regard to the safety requirements of the European Standard



	Hörmann brand	brand	brand	brand
Is the door leaf safeguarded against crashing to the floor? 1 2	•			
Is the door featuring torsion spring technology equipped with spring safety devices as standard?	•			
Does the door with tension spring technology guarantee that even on spring or cable failure an imbalance no greater than 200 N is produced?	V			
In the event of cable failure is the door brought to a safe halt after a maximum of 300 mm?	~			
Are steel cables internally guided in order to prevent injuries?	<b>✓</b>			
Does the door offer comprehensive protection against crushing, cutting, shearing and getting caught up? 3 4 6 7	<b>✓</b>			
Does the sectional door offer finger-trap protection both inside and outside between the individual door sections? 3 4	<b>v</b>			
Is finger-trap protection provided between the individual door sections also in the region of the wicket door? (3)	~			
Do the door leaf hinges also offer protection to eliminate the risk of trapped fingers?	<b>~</b>			
Are the tracks designed in such a way that it is impossible for the rollers to leave the tracks?	<b>~</b>			
Are the hinges safeguarded against flying off? 8	<b>~</b>			
Are the steel cables assigned safety factor 6?	~			
Do the cable drums have safety windings at the end-of-travel position ? (10)	<b>~</b>			

1 2 3 ... see explanations on pages 2 and 3

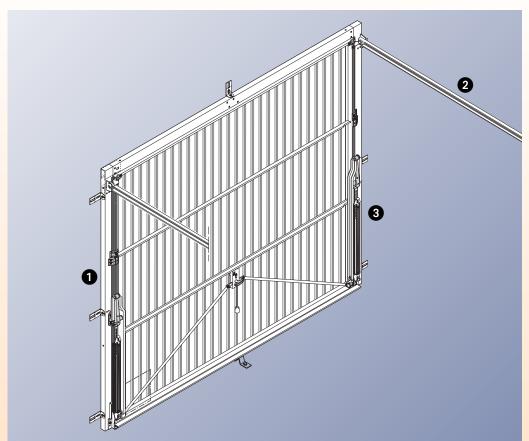
## Play safe with Hörmann

## Safety to European Standard 12604 - Already standard at Hörmann since 1999!

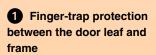


Even Hörmann's original up-and-over "Berry" door is in line with the latest state-of-the-art technology!









The flexible plastic strip on the door leaf and frame prevents trapped fingers.

There is a minimum safety gap of 25 mm between the support arms. ( EN 12604 ).



2 Ceiling track
The ceiling track ensures that
the door leaf is always safely
guided. ( EN 12604 ).



N 80 DF 98

#### 3 Multiple spring system with finger-trap protection

On all Hörmann up-and-over doors the door leaf weight is spread over several springs. No carrying device needs to balance more than 200 N in weight.  $\[ \mathbb{E} \] \]$  ).

Each spring is safeguarded against being catapulted off. And thanks to the minimum distance between the windings, there is also no risk of trapped fingers.

## Check list for up-and-over doors

# with regard to the safety requirements of the European Standard

	Hörmann brand	brand	brand	brand
Is there trap protection or an adequate safety gap of 25 mm between the door leaf and frame?	V			
Is the door safely and securely guided as well as protected against uncontrolled movements? 2	V			
Are the track rollers designed in such a way that it is impossible for them to leave the tracks?	V			
Is the door leaf safeguarded against crashing to the floor?	V			
Is it guaranteed that even in the event of spring failure an imbalance no greater than 200 N is produced?	V			
Are the springs safeguarded against flying off? 3	V			
Is the spring system designed in such a way that there is no possibility of sustaining trapped fingers? 3	V			

123 ... see explanations on page 5

