

# Crash Test Results

## New Car Safety

### HYUNDAI i20 (6 airbags)

2010 on

Front+side+head airbags\*



Offset crash test at 64km/h

#### FRONTAL OFFSET CRASH TEST (v4.2)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.07 pts, upper legs 3 pts, lower legs 3 pts.

The passenger compartment held its shape well in the offset crash test. The clutch pedal moved rearwards by 42 mm and upwards 21 mm. The steering wheel hub moved 44mm forward, 12mm downward and 2 mm sideways. The front ("A") pillar moved 5 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. Dash components were a potential source of injury for the driver and passenger knees. The passenger's head was cushioned by the airbag.


#### SIDE IMPACT CRASH TEST (v4.2)

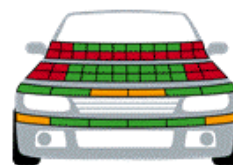
Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### PEDESTRIAN PROTECTION: 3 Stars

Most of the bumper provided good protection to pedestrians' legs, as did most parts of the bonnet edge. The protection offered by the bonnet was good in most areas likely to be struck by a child's head but was predominantly poor in those areas where an adult's head would hit.

PEDESTRIAN PROTECTION		
 <b>ANCAP</b> Rated ★ ★ ★ ★ Tested by Euro NCAP v4.2	Child head impacts	8
	Adult head impacts	4
	Upper leg impacts	5.22
	Lower leg impacts	5.79
	Total (out of 36)	23.01



■ GOOD  
■ MARGINAL  
■ POOR


**ANCAP** Occupant Protection  
 Rated ★ ★ ★ ★ ★

**Occupant Protection Score 34.07 out of 37**

\* Safety equipment, as tested, not standard on all variants

Variant: 5 door GL Eng: 1.4 litre  
 Kerb weight: 1040 kg Category: CAR - LIGHT  
 Vehicles built: 2009 Tested by Euro NCAP

**Important note:** The *left-hand-drive* 5-door hatch was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page. Hyundai provided evidence to ANCAP that 3-door variants of the i20 can be expected to provide comparable protection to the 5-door hatch tested by Euro NCAP.

#### Model History and Safety Features

The tested model of Hyundai i20 was introduced in Australia during 2010. This 5-star rating applies to all i20 variants fitted with 6 airbags. A separate ANCAP rating is available for the i20 with 2 airbags.

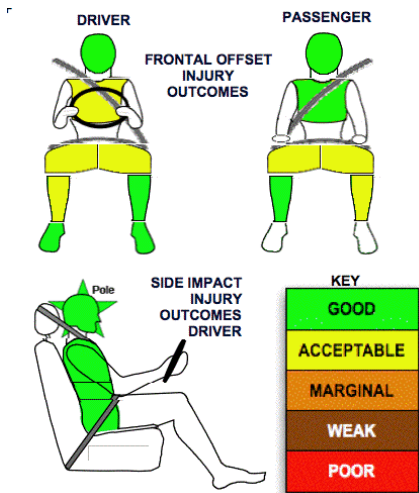
Dual front airbags, antilock brakes (ABS) with electronic brake distribution (EBD) and electronic stability control (ESC) are standard. Side airbags and head-protecting side curtains are standard on the Elite and Premium variants and are optional on the Active variant. Intelligent seat belt reminders are fitted to all seats.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

#### OCCUPANT PROTECTION: 5 Stars

The i20 scored 13.07 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest injury for the driver. There was a slight risk of serious leg injury for the driver and passenger.

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the optional pole test.



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**ANCAP**  
 Crash testing for safety  
 AUSTRALASIAN  
 NEW CAR ASSESSMENT  
 PROGRAM

# TECHNICAL DATA - HYUNDAI i20 with 6 Airbags - 2010 on

## INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passenger	Driver
<b>Head HIC</b>	443	383	105
Acceleration (g for 3ms)	52.7	47.7	30.9
<b>Neck - Shear (kN)</b>	0.68	0.36	-
Tension (kN)	1.47	1.17	-
Extension (Nm)	22.4	15.3	-
<b>Chest Accln (g for 3ms)</b>			-
Compression (mm)	28.48	19.35	20.06
Viscous criterion (m/s)	0.09	0.08	0.11
<b>Abdomen - Force (kN)</b>	-	-	0.900
<b>Pelvis - Force (kN)</b>	-	-	1.510
<b>Upper legs Force (kN)</b>			
Left	0.71	1.50	
Right	1.96	0.30	
<b>Knee displ (mm)</b>			
Left	0.00	5.80	
Right	0.80	0.00	
<b>Lower legs Force (kN)</b>			
Left	1.16	2.28	
Right	3.50	1.47	
<b>Index (Upper/Low)</b>			
Left	0.30 /0.25	0.31 /0.19	
Right	0.40 /0.19	0.28/0.19	

### Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 3 (see table below for details)

### Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable loading	1 pt deduction left & right (driver and passenger)
Lower leg	No deduction
Foot score	Score 4 points

### Modifiers - deductions from side impact test scores

Chest	No deduction
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### Safety features

These specifications are subject to change. Please check with manufacturer for the latest specifications.



Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution / Brake Assist	S/S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	O ✓	3 point centre rear seat belt	S
Side airbags, front seats - head protection	O ✓	Active head restraints - front seats	X
Side airbags, rear seats - head protection	O ✓	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Intelligent seat belt reminder - rear seats	S

Key: ✓ = Fitted to vehicle that was crash tested (where not standard)

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

# ESC required by ANCAP for 5 star rating from 2008