ANCAP Safety Rating HYUNDAI i20 (From 2011)



	Test Variant:	HYUNDAI i20
ĺ	Variant Applicability*:	All variants from 2011
	Kerb Mass:	1040 kg
Ì	Vehicles Built:	2009
	Engine:	1.4 petrol
	Category:	SMALL CAR

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.



Frontal offset test at 64 km/h

Airbags	ESC	Frontal Offset	Side Impact	Pole	Whiplash	Pedestrian	Seat Belt Reminders	Overall Score	ANCAP Safety Rating
Frontal + Side + Head	Standard	13.07 (out of 16)	16.00 (out of 16)	2 (out of 2)	NOT RATED	ACCEPTABLE	3 (out of 3)	34.07 (out of 37)	****

The Hyundai i20 was introduced in Australia and New Zealand in 2010. This ANCAP 5 star safety rating applies to all i20 variants built from 2011 when 6 airbags became standard.

Dual frontal, side chest and side head airbags (curtains) are standard. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to all seats.

In the offset crash test driver chest and leg protection was acceptable. Passenger leg protection was also acceptable, The driver was well protected in the side impact test. Head protection in the side pole test was good.

OCCUPANT PROTECTION

Frontal Offset Test.

Each body region is scored out of 4 points

Head / neck: 4.00 points
Chest: 3.07 points
Upper legs: 3.00 points
Lower legs: 3.00 points

The passenger compartment held its shape well in the offset test. Pedal and steering wheel displacements were well controlled. Driver and passenger contact with the airbags was stable. Dash components were a potential source of injury for the driver and passenger knees. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

Side Impact Test.

Each body region is scored out of 4 points

Head: 4.00 points Chest: 4.00 points Abdomen: 4.00 points Pelvis: 4.00 points

Good protection was provided for the driver in the side impact test. The side airbags performed well.

Pole Test.

Scored out of 2 points

The vehicle was eligible for a side pole test because it has side curtain airbags. The vehicle scored the maximum 2 points for head protection in this test.

Whiplash Protection Test.

Whiplash protection is assessed to the RCAR Protocol

Not rated. The seat tested by Euro NCAP is not the same as the Australasian seat.

Injury Outcomes.







PEDESTRIAN PROTECTION

Pedestrian Test.

Acceptable - Scored 23.012 out of 36 points

Child head impacts: 8.00 points
Adult head impacts: 4.00 points
Upper leg impacts: 5.22 points
Lower leg impacts: 5.79 points

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.



(Tested by Euro NCAP v5.3)



HYUNDAI i20

SAFETY FEATURES

These specifications are subject to change. Please check with manufacturer for the latest specifications. For a description of these safety features and safety rating requirements see the ANCAP Road Map.

Safety Assist Technology (SAT)	Availability
Front airbag - driver	S
Front airbag - passenger	S
Side airbags (chest protection) - front seats	S
Side airbags (head protection) - front seats	S
Side airbags (head protection) - 2nd row seats	S
Knee airbag - driver	Χ
Three-point seat belts for all forward facing seats	S
Seat belt pretensioners (front / rear outboard)	S/X
Intelligent seat belt reminder - driver	S
Intelligent seat belt reminder - front passenger	S
Intelligent seat belt reminder - 2nd row seats	S
Head restraints for all seats	S
Antilock brakes (ABS)	S
Electronic brake distribution (EBD)	S
Emergency brake assist (EBA)	Χ
Electronic stability control (ESC)	S
Adaptive cruise control (ACC)	Χ
Autonomous emergency braking (AEB)	Χ
Lane support system	Χ

- 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.

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INJURY MEASUREMENTS

Body Region	Frontal offset (v:	Side impact test at 50 km/h (v5.1)	
	Driver	Passenger	Driver
Head			
HIC	443.00	383.00	105.00
Acceleration (g for 3ms)	52.70	47.70	30.90
Neck			
Shear (kN)	0.68	0.36	-
Tension (kN)	1.47	1.17	-
Extension (Nm)	22.40	15.30	-
Chest			
Acceleration (g for 3ms)			-
Compression (mm)	28.48	19.35	20.06
Viscous criterion (m/s)	0.09	0.08	0.11
Abdomen			
Force (kN)	-	-	0.90
Pelvis			
Force (kN)	_	-	1.51
Upper legs			
Femur force left (kN)	0.71	1.50	
Femur force right (kN)	1.96	0.30	
Knee displacement left (mm)	0.00	5.80	
Knee displacement right (mm)	0.80	0.00	
Lower legs			
Force left (kN)	1.16	2.28	
Force right (kN)	3.50	1.47	
Index (upper / lower) left	0.30 / 0.25	0.31 / 0.19	
Index (upper / lower) right	0.40 / 0.19	0.28 / 0.19	

INTRUSION MEASUREMENTS

Steering Column

Forwards: 44mm Downwards: 12mm Sideways: 2mm

Pedals

Clutch (rearwards): 42mm Clutch (upwards): 21mm A-Pillar (rearwards): 5mm

SCORE DEDUCTIONS

Deductions from frontal offset test scores

Left knee hazard for driver: 1 point from upper leg score Right knee hazard for driver: 1 point from upper leg score Left knee hazard for passenger: 1 point from upper leg score Right knee hazard for passenger: 1 point from upper leg score

Deductions from side impact test score

No deductions for side impact test.

Deductions from pole test score

No deductions for pole test.

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^{*} For information about the application of ANCAP ratings to model variants see the ANCAP Variant Policy. In brief, ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases ANCAP considers technical evidence submitted by manufacturers before deciding on extending a rating to additional variants of a model.

[^] Refer ANCAP Rating Road Map (www.ancap.com.au/media).