

ANCAP Safety Rating

HYUNDAI i20 (December 2016 - onwards)



Hyundai i20 Cross

This ANCAP safety rating applies to:

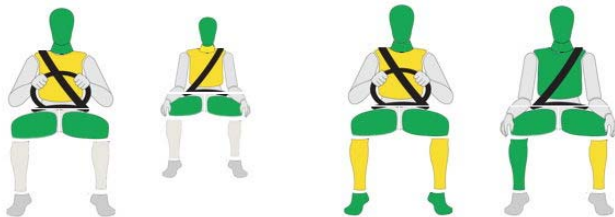
Make / Model	Hyundai i20
Year Range	December 2016 - onwards
Variants*	All Hatch & Cross variants
Vehicle Type	Small car

The Hyundai i20 was introduced in New Zealand in December 2016. It is not sold in Australia. This ANCAP safety rating is based on tests conducted by Euro NCAP and applies to all i20 Hatch and Cross variants.

Dual frontal, side chest and side head-protecting airbags (curtains) are standard. Autonomous emergency braking (AEB), lane support systems (LSS) and emergency braking assist (EBA) are not available. A full list of safety features and technologies can be viewed within the *Safety Features & Technologies* table on page 2 of this report.

Injury Outcomes.

Full Width Frontal Driver Rear Passenger **Frontal Offset** Driver Front Passenger



Side Impact Driver



Pole Driver



Whiplash Protection Rear Front



Test Results Summary.

Airbags	Dual Frontal, Side, Head
Adult Occupant Protection	85% (32.66 out of 38)
- Full Width Frontal Test [#]	7.79 (out of 8)
- Frontal Offset Test [#]	7.68 (out of 8)
- Side Impact Test [#]	7.50 (out of 8)
- Pole Test [#]	7.50 (out of 8)
- Whiplash Protection Test	2.20 (out of 3)
- AEB (City)	0.00 (out of 3)
Child Occupant Protection	73% (35.83 out of 49)
Safety Assist	64% (8.33 out of 13)
- Speed Assistance System	1.33 (out of 3)
- Electronic Stability Control	3.00 (out of 3)
- Seat Belt Reminders	3.00 (out of 3)
- Lane Support System	1.00 (out of 1)
- AEB (Interurban)	0.00 (out of 3)
Pedestrian Protection	79% (28.46 out of 36)
ANCAP Safety Rating	★★★★★
Rating Year[^]	2015

[#] Scaled scores. Total test score out of 16.00 points.

Adult Occupant Protection.

Full Width Frontal Test

Each body region is scored out of 4 points

Driver	Rear Passenger
Head: 4.00 points	Head: 4.00 points
Neck: 4.00 points	Neck: 3.78 points
Chest: 3.81 points	Chest: 3.55 points
Upper legs: 4.00 points	Upper legs: 4.00 points

Chest protection was acceptable for the driver and rear passenger in the full width frontal test.

Frontal Offset Test

Each body region is scored out of 4 points

Driver / Front Passenger (lesser of each)
Head / neck: 4.00 points
Chest: 3.89 points
Upper legs: 4.00 points
Lower legs: 3.47 points

The passenger compartment held its shape well in the frontal offset test. Driver chest and leg protection was acceptable. There was a slight risk of serious leg injury for the passenger.

Side Impact Test

Pole Test

Each body region is scored out of 4 points

Head: 3.00 points	Head: 3.00 points
Chest: 4.00 points	Chest: 4.00 points
Abdomen: 4.00 points	Abdomen: 4.00 points
Pelvis: 4.00 points	Pelvis: 4.00 points

In both the side impact and pole tests the curtain airbag caught in the trim and did not fully deploy as intended. A penalty was applied to the head scores for both tests.

Whiplash Protection

Front / Rear:	1.82 points
Rear:	0.38 points
AEB (City):	0.00 points [Not available]

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Child Occupant Protection.

Crash Test Performance

18 month old child: 9.42 points
3 year old child: 9.42 points

Child Safety Features & Child Seat Installation

Safety features: 5.00 points
Installation check: 12.00 points

NOTE: The child restraints tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. For more detailed information about Australian child restraints visit childcarseats.com.au.

Pedestrian Protection.

Scored out of 36 points

Adult & child head impacts: 16.46 points
Upper leg impacts: 6.00 points
Lower leg impacts: 6.00 points

This vehicle scored 28.46 out of 36 points (Good). The i20 provided good protection both to the leg and the pelvis, and scored maximum points in these tests. The bonnet offered predominantly good or adequate protection to the head, with some poor results recorded only on the stiff windscreen pillars. (Euro NCAP v8)



Score Deductions.

Deductions from full width frontal test scores

Neck: No deductions
Head: No deductions
Chest: No deductions
Upper legs/pelvis: No deductions
Overall: No deductions

Deductions from frontal offset test scores

Head / neck: No deductions
Chest: No deductions
Upper legs: No deductions
Lower legs: No deductions
Overall: No deductions

Deductions from side impact test score

Head / neck: -1.00 points
(incorrect head airbag deployment)
Chest: No deductions
Abdomen: No deductions
Pelvis: No deductions
Overall: No deductions

Deductions from pole test score

Head / neck: -1.00 points
(incorrect head airbag deployment)
Chest: No deductions
Abdomen: No deductions
Pelvis: No deductions
Overall: No deductions

Safety Features & Technologies.

Descriptions of each of these safety features and safety assist technologies (SAT) can be found at ancap.com.au.

Safety Feature / Safety Assist Technology	Availability
Seat belts (three-point, lap/sash) for all forward-facing seats	S
Seat belt pretensioners (front)	S
Seat belt pretensioners (rear outboard)	S
Intelligent seat belt reminder (driver)	S
Intelligent seat belt reminder (front passenger)	S
Intelligent seat belt reminder (2 nd row seats)	S
Airbag - Frontal (driver)	S
Airbag - Frontal (passenger)	S
Airbag - Side, chest protection (front seats)	S
Airbag - Side, chest protection (2 nd row seats)	X
Airbag - Side, head protection (front seats)	S
Airbag - Side, head protection (2 nd row seats)	S
Airbag - Knee (driver)	X
Airbag - Knee (front passenger)	X
Head restraints for all seats	S
Adaptive cruise control (ACC)	X
Antilock braking system (ABS)	S
Autonomous emergency braking (AEB)	
- City	X
- Interurban	X
- Vulnerable road user	X
Automatic headlights	S
Automatic high beam	X
Blind spot monitoring (BSM)	X
Daytime running lights (DRL)	S
Electronic brakeforce distribution (EBD)	S
Electronic stability control (ESC)	S
Emergency brake assist (EBA)	S
Emergency stop signal (ESS)	S
Hill launch assist	S
Lane support system (LSS)	S
Rain-sensing wipers	S
Reversing collision avoidance	S
Speed assistance – automatic / intelligent speed limiting (ISA)	X
Speed assistance - manual speed limiting	S
Speed assistance - speed sign recognition & warning	X
Tyre pressure monitoring system (TPMS)	S

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.
E = Available in Europe but not available on any Australasian variant.

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

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Safety Assist.

Speed Assistance System (SAS)

Scored 1.33 out of 3.00 points

Speed information: [Not available]
Speed assistance (manual): Pass
Speed assistance (automatic / intelligent): [Not available]

Electronic Stability Control (ESC)

Scored 3.00 out of 3.00 points

AEB (Interurban)

Scored 0.00 out of 3.00 points

[Not available]

Seat Belt Reminder (SBR)

Scored 3.00 out of 3.00 points

Driver and passenger: Pass
Rear: Pass

Lane Support Systems (LSS)

Scored 1.00 out of 1.00 point

Type: Lane departure warning

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Injury Values & Measurements.

Body Region	Frontal offset test at 64km/h (v7)		Full width frontal test at 50km/h (v1)		Side impact test at 50km/h (v7)	Oblique pole test at 32km/h (v7)
	Driver	Front Passenger	Driver	Rear Passenger	Driver	Driver
Head						
HIC	127.00	145.00	175.00	386.00	82.00	314.45
Acceleration (g for 3ms)	37.90	40.40	45.40	61.00	32.70	57.01
Neck						
Shear (kN)	0.53	0.35	0.27	1.17	-	-
Tension (kN)	1.18	1.06	1.14	1.90	-	-
Extension (Nm)	13.70	20.20	20.00	17.90	-	-
Chest						
Acceleration (g for 3ms)	-	-	-	-	-	-
Compression (mm)	22.53	19.13	19.12	20.72	15.44	26.97
Viscous criterion (m/s)	0.06	0.05	0.09	0.11	0.09	0.16
Abdomen						
Compression (mm)	-	-	-	-	18.38	23.60
Pelvis						
Force (kN)	-	-	-	-	1.02	1.10
Upper legs						
Femur force left (kN)	0.08	0.26	0.20	0.28		
Femur force right (kN)	0.78	0.12	0.14	0.00		
Knee displacement left (mm)	0.16	0.17	1.43			
Knee displacement right (mm)	0.09	0.12	0.76			
Lower legs						
Force left (kN)	1.84	2.32	-	-		
Force right (kN)	2.60	1.65	-	-		
Index (upper / lower) left	0.43 / 0.19	0.26 / 0.28	-	-		
Index (upper / lower) right	0.52 / 0.26	0.33 / 0.18	-	-		
Intrusion Measurements						
Steering column						
Forward (mm)	37	-	-	-		
Downward (mm)	3	-	-	-		
Sideways (mm)	5	-	-	-		
Pedals						
Clutch - rearward (mm)	47	-	-	-		
Clutch - upward (mm)	39	-	-	-		
A-Pillar						
Rearward (mm)	4	-	-	-		

* **Model Variants:** ANCAP safety 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. For further information about the application of ANCAP safety ratings to model variants, see the ANCAP Variant Policy.

^ **Rating Year:** The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and may be based on the year in which a new vehicle model is first launched into the Australian and/or New Zealand markets; the year in which the vehicle was tested (if tested by Euro NCAP); or, for vehicles which hold an existing ANCAP safety rating, the year in which the rating was updated (or earlier applicable year).

Assessment Details.

Tested Make / Model	Hyundai i20 1.2 GLS, LHD
Tested Vehicle(s) Built	2015
Tested Body Type	5 door hatch
Tested Vehicle Kerb Weight	1040 kg
Tested Vehicle Engine	1.2 litre petrol
Tested By	Euro NCAP
Assessed By	Euro NCAP
Document Reference	i20cross17
Document Created / Revised	17 March 2017
Rating Published	March 2017
Rating Updated	n/a



Frontal offset test at 64km/h

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