

# Crash Test Results

## New Car Safety

### HYUNDAI SANTA FE

From Aug 2012 Front+side+head+knee airbags



**ANCAP**

Safety ★★★★★

**Safety Rating**

**Occupant Protection Score 35.63 out of 37**

Tested variant: 5 seat "Comfort" Eng: 2.2 diesel

Kerb mass 1910 kg Category: SUV - LARGE

Vehicles built: 2012 Tested by Euro NCAP

**Important note:** The diesel left-hand-drive European model was tested by Euro NCAP. ANCAP was provided with technical information which showed that the results apply to 4 cylinder Australasian variants with all-wheel-drive.

#### Model History and Safety Features

The tested model of Hyundai Santa Fe was introduced in Australia in August 2012. This ANCAP rating applies to all Australasian variants with 4 cylinder engines and all-wheel-drive. The V6 New Zealand variant is unrated.

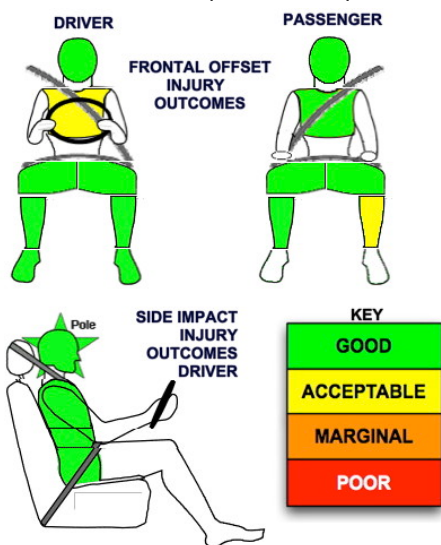
Dual front airbags, side airbags, head-protecting side curtains and driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

#### OCCUPANT PROTECTION: 5 Stars

The Santa Fe scored 15.63 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.

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



Offset crash test at 64km/h (Euro NCAP)

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.72 pts, upper legs 4 pts, lower legs 3.91 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 83 mm and upwards 40 mm. The steering wheel hub moved 41mm forward, 26mm downward and 1 mm sideways. The front ("A") pillar moved 4 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. There were no knee hazards. The passenger's head was cushioned by the airbag.

#### SIDE IMPACT CRASH TEST

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

The side impact test simulates a small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Santa Fe. Experience shows that such vehicles can be expected to perform well in this test and the vehicle scored full marks.

The vehicle was eligible for a pole impact test, since it had head-protecting side airbags. The vehicle earned the maximum two points in this test.

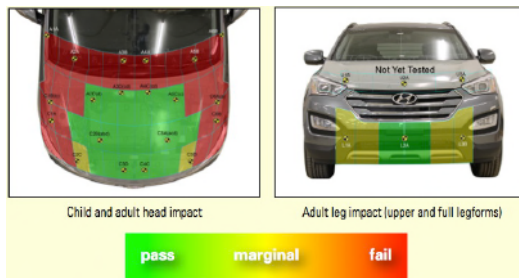
#### PEDESTRIAN PROTECTION: Marginal

This is a provisional rating. Upper leg tests are pending but will not change the rating. The vehicle tested by Euro NCAP had a pop-up bonnet. The Australasian vehicle does not have this feature and so ANCAP arranged separate tests which showed that pedestrian protection was worse than the European model.

PEDESTRIAN PROTECTION	Child head impacts	7.08
<b>MARGINAL</b>	Adult head impacts	3
	Upper leg impacts	Pending
	Lower leg impacts	4.24
	Total (out of 36)	14.32

Tested by ANCAP v5.3

#### Whiplash Protection (RCAR Protocol)



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santafe12.doc Rated: 2012

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AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

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# TECHNICAL DATA - HYUNDAI SANTA FE - From August 2012

## INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v5.2)		Side Impact Crash Test at 50km/h (v5.2)
	Driver	Passenger	Driver
<b>Head HIC</b>	218	248	15
Acceleration (g for 3ms)	37.2	38.0	14.8
<b>Neck - Shear (kN)</b>	0.34	0.32	-
Tension (kN)	1.34	0.03	-
Extension (Nm)	7.8	16.0	-
<b>Chest Accln (g for 3ms)</b>	-	-	-
Compression (mm)	23.96	21.38	8.56
Viscous criterion (m/s)	0.06	0.04	0.03
<b>Abdomen - Force (kN)</b>	-	-	0.270
<b>Pelvis - Force (kN)</b>	-	-	0.690
<b>Upper legs Force (kN)</b>			
Left	0.15	0.20	
Right	0.24	0.20	
Knee displ (mm)			
Left	1.00	0.70	
Right	0.80	0.90	
<b>Lower legs Force (kN)</b>			
Left	1.45	2.13	
Right	1.29	1.09	
Index (Upper/Low)			
Left	0.38 /0.16	0.24 /0.21	
Right	0.30 /0.17	.33/.14	

### Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 2 (see table below for details)

### Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
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	S	3 point seat belt for all forward-facing seats	S
Side airbags, front seats - head protection	S	Whiplash protection (RCAR protocol)	Good
Side airbags, rear seats - head protection		Intelligent seat belt reminder - driver	S
Driver knee airbag	S	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Intelligent seat belt reminder - rear seats	X

Key:

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



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