

# Mercedes-Benz C-Class

Mercedes-Benz C-Class C220 'Avantgarde', LHD









2014 숬숬숬숬숬



# DETAILS OF TESTED CAR

#### SPECIFICATIONS

Tested model	Mercedes-Benz C-Class C220 'Avantgarde', LHD
Body type	4 door sedan
Year of publication	2014
Kerb weight	1570kg
VIN from which rating applies	from VIN number #####

#### SAFETY EQUIPMENT

Frontal airbags	Driver (Dual Stage), Passenger (Dual Stage)
Pre-tensioners	Driver (single), Passenger (single), Rear (outboard seats)
Load-limiters	Driver, Passenger, Rear (outboard seats)
Knee airbags	Driver
Side airbags	Head (front and rear), Thorax (combined with pelvis), Pelvis
Front head restraints	Passive
Passenger airbag switch	Automatic switch
ISOFIX anchorages	Rear outboard seats
Integrated child restraint	None
Active Pedestrian Protection	deployable bonnet, Standard
Seatbelt Reminder	Driver, Passenger, Rear
Electronic Stability Control	ESP, Standard, Manual Switch
Speed Assistance Systems	Driver-set speed limitation, Optional (meeting fitment requirements)
Lane Support	Lane Departure Warning and Assist, Optional (not meeting fitment requirements)
Autonomous Braking	Collision Prevention Assist PLUS, City and Inter-Urban (Auto-Brake and Forward Collision Warning) system, Standard
Other	Attention Assist - fatigue warning (Standard); Traffic Sign Assist (Optional); Active Blind Spot Assist (Optional)

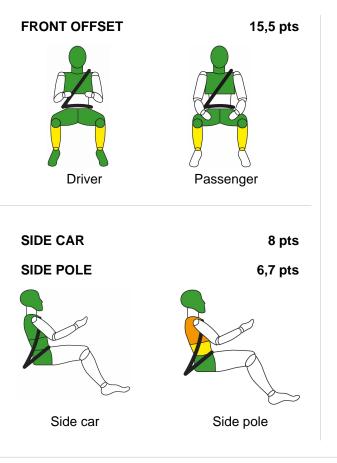
Safety equipment is standard across the model range unless stated otherwise



# ADULT OCCUPANT

Total 35 pts | 92%

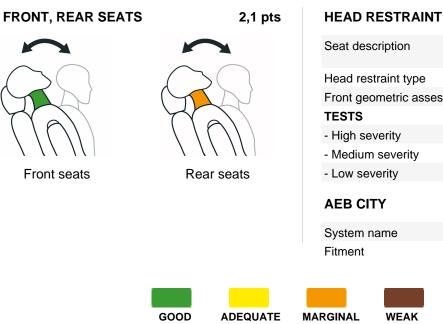
#### **CRASH TEST PERFORMANCE**



HEAD						
Driver airbag contact	stable					
Passenger airbag contact	stable					
CHEST						
Passenger compartment	stable					
Windscreen Pillar rearward	2mm					
Steering wheel rearward	none					
Steering wheel upward	none					
Chest contact with steering wheel	none					
UPPER LEGS, KNEES AND PE	LVIS					
Stiff structures in dashboard	none					
Concentrated loads on knees	none					
LOWER LEGS AND FEET						
Footwell Collapse	none					
Rearward pedal movement	Brake - 31.8mm					
Upward pedal movement	Brake - 2.2mm					
SIDE						
Head protection airbag	Yes					
Chest protection airbag	Yes					

**FRONT OFFSET** 

# WHIPLASH PROTECTION



Seat description	Standard cloth and artifical leather, 6 way, semi-electric				
Head restraint type	Passive				
Front geometric assessment	2 pts				
TESTS					
- High severity	2,4 pts				
- Medium severity	2,3 pts				
- Low severity	2,6 pts				
AEB CITY	2,8 pts				
System name	Collision Prevention Assist PLUS				
Fitment	Standard				
GINAL WEAK POOR					

#### **TEST RESULTS**

### CHILD OCCUPANT



## Total 42 pts | 84%

#### **CRASH TEST PERFORMANCE**

18 MONTH OLD CHILD	FRONTAL IMPACT				
Restraint Römer BabySafe + ISOFIX Base	Head forward movement protected				
Facing rearward facing	Head acceleration	good			
Installation ISOFIX and Supportleg	Chest load	good			
PERFORMANCE 12 pts	SIDE IMPACT				
	Head containment	protected			
	Head acceleration	good			
3 YEAR OLD CHILD	FRONTAL IMPACT				
3 YEAR OLD CHILD Restraint Römer Duo Plus	FRONTAL IMPACT Head forward movement	protected			
		protected good			
Restraint Römer Duo Plus	Head forward movement				
RestraintRömer Duo PlusFacingforward facing	Head forward movement Head acceleration	good			

### CHILD SAFETY FEATURES AND CRS INSTALLATION CHECK



Maxi Cosi Cabriofix (Seatbelt) Römer King Plus (Seatbelt) Römer Duo Plus (ISOFIX) Römer KidFix (Seatbelt)

Maxi Cosi Cabriofix and EasyFix (Seatbelt) Maxi Cosi Cabriofix and EasyFix (ISOFIX)

Römer BabySafe + ISOFIX Base (ISOFIX)

BeSafe iZi Kid X3 ISOfix (ISOFIX) Maxi Cosi Pearl and Familyfix (ISOFIX)

Römer KidFix (ISOFIX)

Römer Duo Plus (ISOFIX)



N/A

N/A

Exempt

Exempt

Pass

Pass

Exempt

Exempt

Pass

Pass

N/A

N/A

N/A

N/A

N/A

N/A

Safety features score				9 pts					
Installatio	on check	score	12	12 pts					
Pass			Inc	tall witho	ut proble	m			
Partial Fail Install with care									
Fail Safety critical problem									
Exempt	Exempt Installation not allowed								
			SEAT PC	SITION					
FRO	NT		2nd ROW	ROW 3rd ROW					
CENTER	RIGHT	LEFT	CENTER	RIGHT	LEFT	CENTER	RIGHT		
N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A		
N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Pass	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		
N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A		

# TEST RESULTS

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EURO

OF SAFER CAR

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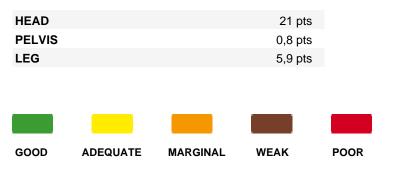
SAFETY ASSIST							Total 9 pts	70%
SPEED ASSISTANCE SYSTEM		1,3 pts		S	EATBE	3 pts		
				- c - r	senger	Pass Pass		
				L	ANE S	UPPC	DRT SYSTEMS	0 pts
ELECTRONIC STABILITY	CONTROL (E	SC) 3 pts						
	Meets re	equirements						
AEB INTERURBAN SYSTI	EMS	1,8 pts					Crash avoided	
							Speed reduced	
APPROACHING A STATIO		1 F					No crash mitigation Not applicable	
Approaching speed (km/h)	10 20	30 40	50	60	70	80		
Auto brake								
Forward collision warning							10-80 km/h	
_								,
APPROACHING A SLOW	MOVING VEH	IICLE						
Approaching speed (km/h)	10 20	30 40	50	60	70	80		LAT
Auto brake								
Forward collision warning							10-80 km/h	20 km/h
APPROACHING A BRAKING VEHICLE WITH SHORT HEADWAY								
Leading vehicle braking	Gentle (2 m/s	2)	Abrup	t (6m/s²)				
Dato brake								
Forward collision warning							50 km/h 12 m	50 km/h
APPROACHING A BRAKING VEHICLE WITH LONG HEADWAY								
Leading vehicle braking	Gentle (2 m/s	<sup>2</sup> )	Abrup	t (6m/s²)				
Auto brake								
Forward collision warning							50 km/h 40 m	50 km/h

PEDESTRIAN



### Total 28 pts | 77%





### EURO NCAP ADVANCED REWARDS

2011 - Mercedes-Benz Attention Assist 2010 - Mercedes-Benz PRE-SAFE®

### COMMENTS

#### Adult occupant

The passenger compartment remained stable in the frontal impact. Dummy readings indicated good protection of the knees and femurs of the driver and passenger dummies. Mercedes-Benz showed that a similar level of protection would be provided for occupants of different statures and those sat in different positions. in the side barrier test, good protection was provided for all body regions and the car scored maximum points. In the side impact, dummy readings of rib compression indicated a marginal level of protection for this part of the body. The protection offered by the front seats against whiplash injury in a rear-impact was good but a geometric assessment of the rear head restraints revealed a marginal level of protection.

#### **Child occupant**

Based on dummy readings in the dynamic tests, the C-Class scored maximum points for its protection of the 1 year infant. Forward movement of the head of the 3 year dummy, sat in a forward-facing restraint, was not excessive. However, chest loads indicated marginal level of protection for this part of the body, and neck forces were also high. In the side impact, both dummies were properly contained by the protective shells of their restraints, minimising the risk of head contact with parts of the car interior. The passenger airbag is automatically disabled when a rearward-facing child restraint is placed on the passenger seat. The system is different from previous Mercedes-Benz systems which only worked with specific seats. Clear information is provided to the driver regarding the status of the airbag and the system was awarded maximum points. All of the child restraints for which the car is designed could be properly fitted and accommondated by the car.

#### Pedestrian

Nearly all of the tests performed on the bumper revealed a good level of protection being offered to pedestrians' legs. However, the front edge of the bonnet was poor in almost all tested areas and scored very few points. The C-Class has an 'active' bonnet for improved head protection. When an impact with a pedestrian is detected, actuators lift the bonnet, creating more space between it and the hard structures in the engine bay. Mercedes-Benz showed that the system worked robustly for pedestrians of different statures and at a wide range of speeds, so the system was tested in the deployed position. Results were good in almost all of the areas tested.

#### **TEST RESULTS**



The C-Class has a seatbelt reminder system for the front and rear seats which met Euro NCAP's requirements. Electronic stability control is also standard equipment. A driver-set speed limitation device is optional but is expected to be fitted to most of the cars sold so was included in the assessment. The system met Euro NCAP's requirements for systems of this type. Collision Prevention Assist PLUS®, fitted as standard equipment, is an autonomous braking system that works at low speeds typical of city driving and at higher speeds, typical of the open road. The system was effective at avoiding collisions up to certain speeds and mitigating them (lowering the severity of the impact) at higher speeds. 'Lane Departure Warning' is also available on the C-Class as an option, as is an active system to help keep the driver in the lane ('Lane Departure Protection'), but these did not meet Euro NCAP's fitment criteria for inclusion in the assessment.