



C L E P A

*European Association of
Automotive Suppliers*

Further Information of booster seat compatibility with cars

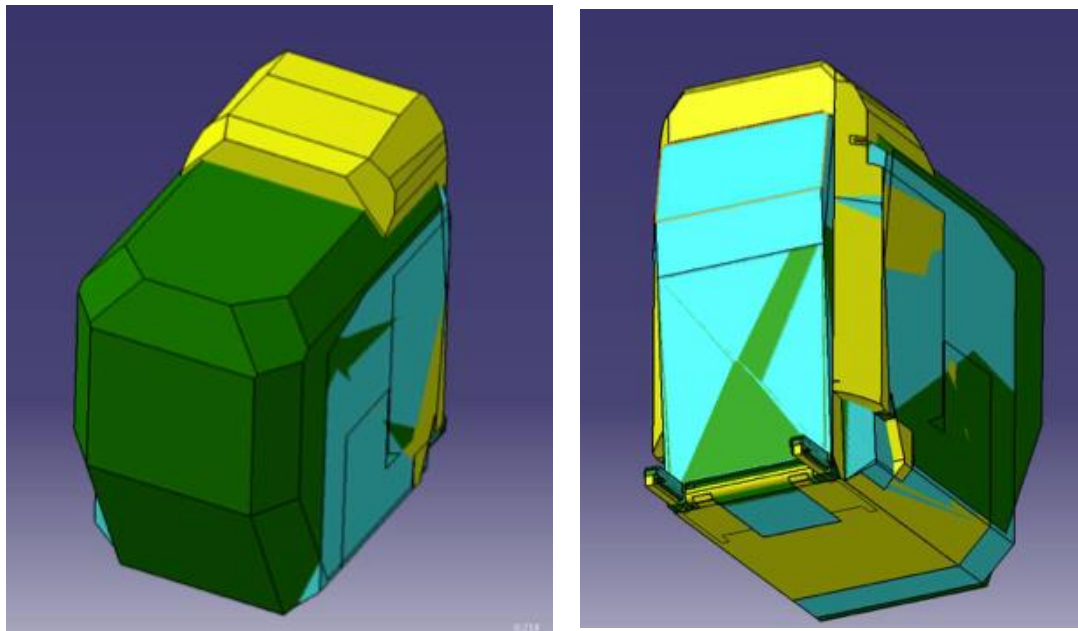
Informal working group

18/6/2015

INTRODUCTION



European commission has suggested to modify the R2, F2x and TF4 box to one uniform i-Size box.



TF4 BOX FITTING IN CARS



The TF4 Box is the proposed box for the R129 phase 2.

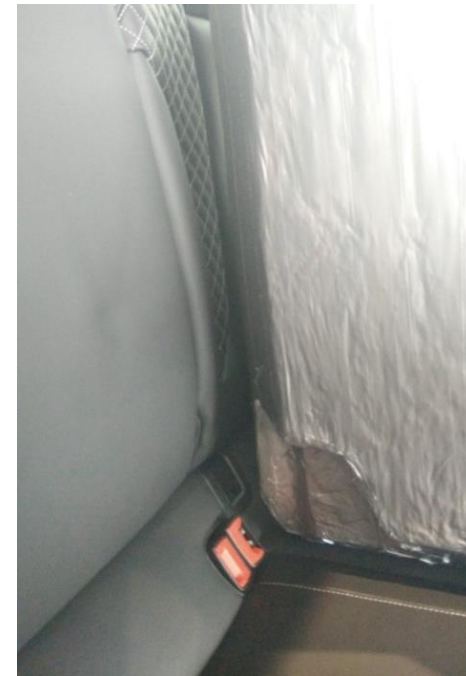
BeSafe has checked 49 cars to see how this box is fitting in cars of the existing car fleet:

- How does the complete TF4 box fit (width 520 mm)
- How does the reduced version of the TF4 box fit (width 440 mm)
- On how many (ISOfi)x seats and in which cars do the reduced version fit?
 - Audi / Volvo / Ford / Volkswagen / Opel / Citroën / Renault / Suzuki have been investigated

TF4 BOX FITTING IN CARS



TF4 BOX FITTING IN CARS



Audi A3 > 2 TF4 boxes of 520 mm. width just fit

TF4 BOX FITTING IN CARS



Audi A8 > 2 TF4 boxes of 520 mm. width fit; 3 boxes with a width of 440 mm. can fit, when only mounted with carbelt.

TF4 BOX FITTING IN CARS



Ford Mondeo > 2 TF4 boxes of 520 mm. width fit, but 3 boxes of 440 mm. width don't fit

TF4 BOX FITTING IN CARS



Ford S-max > 3 TF4 boxes of 440 mm. width with isofix will fit.

TF4 BOX FITTING IN CARS



5/49 cars fit 3 reduced version of the TF4 box (width 440 mm) installed on the ISOfix positions > all these cars have 3 separate seats in the rear

- Ford Galaxy
- Ford S-Max
- Citroën Grand Picasso
- Renault Grand Scenic
- Renault Espace

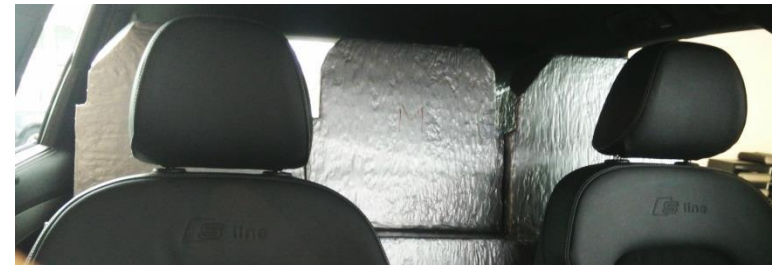


TF4 BOX FITTING IN CARS



19/49 cars fit 3 reduced version of the TF4 box (width 440 mm) with belt installation only

- Audi Q5 (photo)
- Audi A8 (photo)
- **Ford Galaxy**
- **Ford S-Max**
- Ford C-Max
- VW Passat
- VW Passat Variant
- VW Golf Sportsvan
- VW Tiguan
- VW Touran
- VW Touareg
- Citroën DS5
- **Citroën Grand Picasso**
- Volvo V70
- Volvo XC60
- Volvo XC90
- Opel Zafira
- **Renault Espace**
- **Renault Grand Scenic**



TF4 BOX FITTING IN CARS



19/49 cars fit 3 reduced version of the TF4 box (width 440 mm) with belt installation

- On all cars the buckle is no issue



TF4 BOX FITTING IN CARS



49/49 cars fit 2 complete TF4 boxes (width 520 mm) with ISOfix installation.

- It was not able to get a complete box into the Citroën DS3, this is a three-doors car; probably the box would have fitted, once it would be able to get it inside.
- 10/49 were i-Size cars

TF4 BOX FITTING IN CARS



Conclusions of the TF4 and TF4 'reduced width to 440 mm.' fitting

- Almost no cars (5 out of 49) give the possibility to position 3 boxes with 440 mm. width next to each other, using the isofix installation.
- Some cars (19 out of 49) can give the possibility to position 3 boxes with 440 mm. width next to each other, using belt installation only.

Question to the car manufacturers: How much effort will it take to adjust these cars to a rear bench with 3 isofix positions?

- The proposed TF4 (520 mm. width) offers a good defined space to define a booster seat with backrest which fits in all cars (2 seats next to each other)

TF4 BOX FITTING IN CARS



Conclusions for further approach in R129 phase 2

- Reduced width from 520 mm. to 440 mm. leads to less usable space to establish side impact protection in a booster seat, leading to reduced side impact performance
- Only some very large cars facilitate 3 isofix positions (i-Size) on the rear bench