

# CHASSIS ENGINEERING GUIDELINES

(ISSUE A, AUGUST 2018)

**DESIGN GUIDELINES FOR:**  
**FUSO ENDURO FI 4x2**

**MODELS:**  
**FIV1 PKX**

## APPLICATIONS - FLAT DECK, CURTAINSIDER

These recommendations have been prepared for design engineers and body builders as a guide to assist when selecting and specifying chassis modification and/or body fitment.

These guidelines should be read in conjunction with the Mitsubishi Fuso Truck & Bus Body Equipment Mounting Directives available on the FUSO Body Builder Portal.

### CHASSIS FRAME MATERIAL

Hot Rolled Steel, 500 MPa tensile, 460 MPa yield. Refer to chassis section modulus drawing for each model.

### MAXIMUM DESIGN STRESS

Recommended maximum design stress = 35% of chassis yield stress (161 MPa) for sections of frame that are unmodified or do not contain stress raisers. Appropriate allowance should be made for details in the frame that have been modified or contain stress raisers. Refer to the body builders manual for stress levels using static load applications.

### LOAD CONSIDERATIONS

#### FLAT DECK

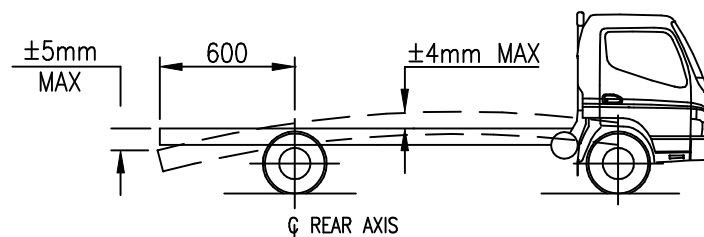
**U.D.L** Consider as a uniformly distributed load over whole or part of deck length.

**CURTAINSIDER** Consider as a uniformly distributed load over whole or part of deck length in conjunction with point loads imposed by body and taillifts.

### MAXIMUM CHASSIS DEFLECTION

**CASE 1** Between front and rear axis.  
Maximum permissible deflection:  $\pm 4\text{mm}$ .

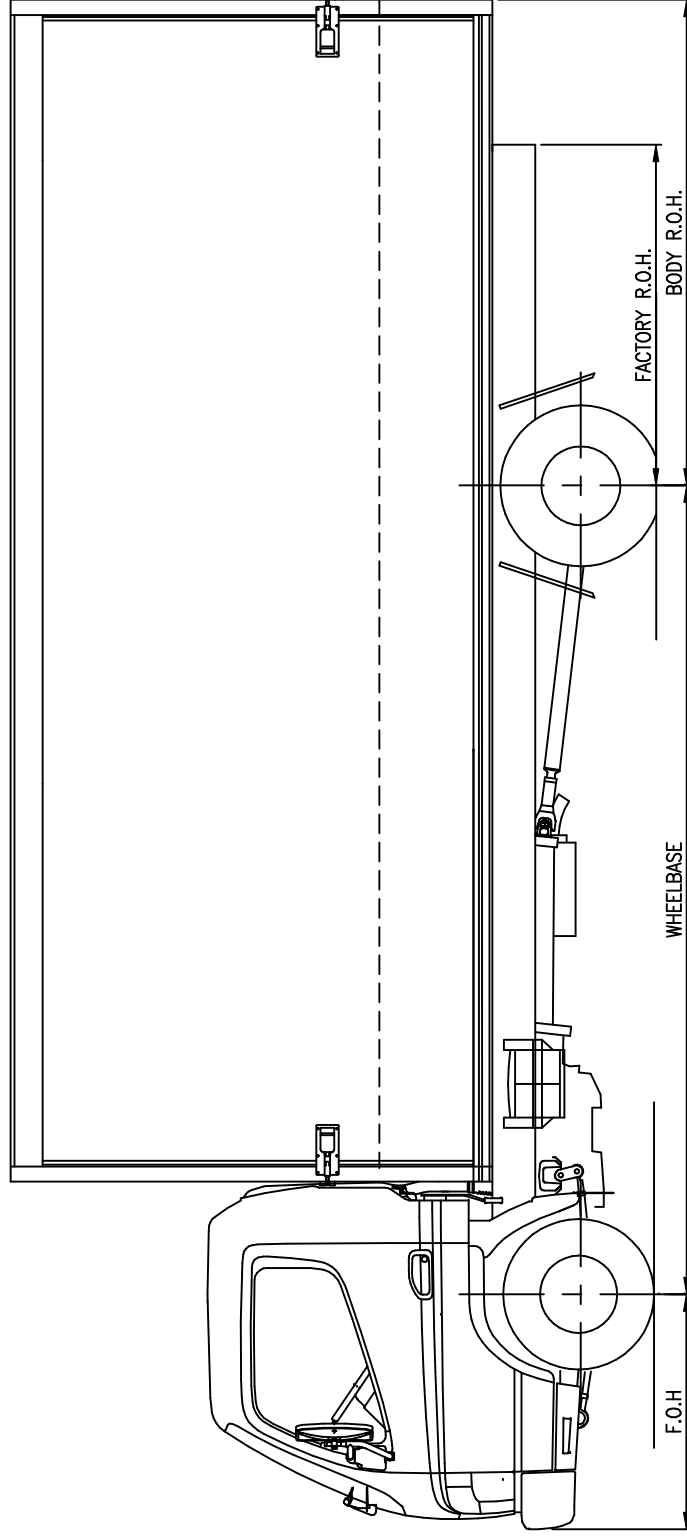
**CASE 2** Rear overhang.  
Maximum permissible deflection: 5mm at 600mm or greater, rear of rear axis.



This specification sheet applies to vehicles supplied by Fuso NZ for the New Zealand market. REF: J22974 / FI-ENDUROSUA.DWG  
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**NOTES:**

- 01) THIS CHASSIS (WITHOUT A SUBFRAME) IS SUITABLE FOR FITTING A CURTAINSIDER BODY AND LOADS UP TO THE FACTORY R.O.H. AS STATED BELOW.
- ADDITIONAL CHASSIS REINFORCEMENT REQUIRED BEYOND THIS LENGTH.
- 02) THE FITTING OF A BODY AND ANY WORK ON THE CHASSIS FRAME MUST BE CARRIED OUT IN ACCORDANCE WITH THE FUSO GUIDELINES FOR THIS MODEL AND GOOD INDUSTRY PRACTICE.
- 03) THIS DRAWING IS FOR USE AS A GUIDE ONLY, TO ASSIST WHEN SELECTING AND SPECIFYING CHASSIS MODIFICATION AND/OR BODY FITMENT.
- 04) REGARDLESS OF THE BODY/CHASSIS REAR OVER HANG, FITMENT OF A TAILLIFT MAY REQUIRE A SUBFRAME OR ADDITIONAL CHASSIS REINFORCEMENT, AND THIS REQUIREMENT SHOULD BE DETERMINED BY ENGINEERING CALCULATION AND ASSESSMENT USING THE FUSO GUIDELINES.



MODEL	WHEELBASE	F.O.H.	FACTORY R.O.H.
FIV1PK	4800mm	1275mm	2400mm

BODY R.O.H.
2600mm

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		CHANGES MADE
		BY



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**FUSO ENDURO FIV1PK 4 x 2**  
**SAMPLE CURTAINSIDER/FLAT DECK LAYOUT**



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