

# TRIVEDI DESIGN PTY LTD

ENGINEERING DESIGN SERVICES    ROAD VEHICLE INDUSTRY & ADR CONSULTANTS  
 (ACN: 059 984 840)  
 8 LEVEY RISE    WINTHROP WA 6150    AUSTRALIA  
 PH/FAX: (61-8) 9332 2030    MOBILE: 0412 45 65 45  
 info@trivedi.com.au    www.trivedi.com.au

## Chassis Modification Calculation Sheet

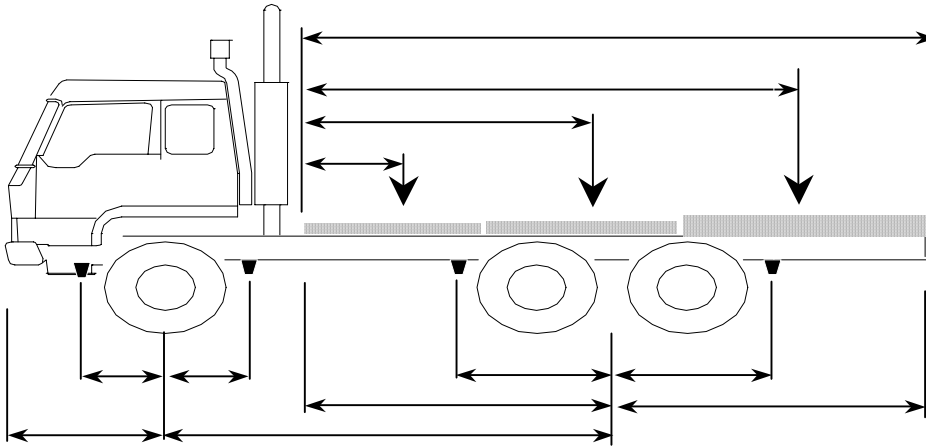
### OWNERS DETAILS

Contact Name: \_\_\_\_\_  
 Trade/Comp. Name: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 Phone No.: \_\_\_\_\_    Mob: \_\_\_\_\_    Fax No.: \_\_\_\_\_

### VEHICLE DETAILS

Vehicle Make & Model: \_\_\_\_\_    Body Type: \_\_\_\_\_  
 Chassis No. (VIN): \_\_\_\_\_    Rego No: \_\_\_\_\_  
 Weld Material: \_\_\_\_\_    Weld Process: \_\_\_\_\_  
 Chassis Material: \_\_\_\_\_    Yield Stress: \_\_\_\_\_  
 Reinforce Material: \_\_\_\_\_    Yield Stress: \_\_\_\_\_

Please show applicable loads for the truck and dimensions on the diagram below.



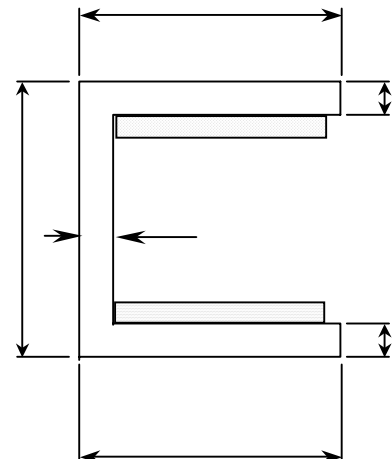
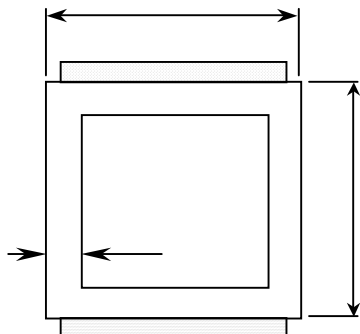
For uniform loads specify tonnage and length, or list point loads and their locations L1, L2, L3.

Load L1 = \_\_\_\_\_ T    Uniform Load: \_\_\_\_\_ T  
 Load L2 = \_\_\_\_\_ T    Distributed Length: \_\_\_\_\_ m  
 Load L3 = \_\_\_\_\_ T

### DATA

Group/Axle No.:	Front/1	Front/2	Front/3	Rear/1	Rear/2	Rear/3	Rear/4	Totals
Tare weight:								
Body & payload:								
Axle(s) capacity:								
Tyres capacity:								
Current reg limit:								

Dimension appropriate section only.



Top Stiffener Size:   
 Bottom Stiffener Size:

**National Code of Practice: Heavy Vehicle Modifications - Checklist H1/H2****WHEELBASE ALTERATIONS OUTSIDE THE FIRST MANUFACTURER'S OPTIONS**

Y=Yes, N=No

<b>1.0</b>	<b>Frame</b>		
1.1	Are all the dimensions of the frame rail (including all sections of a multi channel frame) identical to that offered by the manufacturer for equivalent model?	Y	N
1.2	Are the dimensions of the additional reinforcement identical to those stated in the calculations?	Y	N
1.3	Are the material specifications and tensile yield strength of the original frame rail, frame rail extension and additional reinforcement compatible?	Y	N
1.4	Is the modified chassis frame of sufficient strength for the proposed application?	Y	N
1.5	Is the stress at maximum load less in the modified frame than in a standard unmodified vehicle with the same chassis rail and an equal or longer wheelbase?	Y	N
1.6	Is the type of additional reinforcement as per manufacturer's recommendations or as per this National Code of Practice?	Y	N
1.7	Is the location and attachment of the additional reinforcement as per manufacturer's recommendations or as per this National Code of Practice?	Y	N
1.8	Are all the additional crossmembers of the same design, material specifications, dimension and equivalent attachment as that offered by the manufacturer for the original vehicle?	Y	N
1.9	Is the spacing of the crossmembers on the modified chassis less than the manufacturer's standard crossmember spacing for that model vehicle or alternatively this National Code of Practice?	Y	N
1.10	Are the chassis modifications in accordance with this National Code of Practice or alternatively the manufacturer's recommendations?	Y	N
<b>2.0</b>	<b>Vehicle Specifications</b>		
2.1	Is the axle configuration (ie. 4x2, 6x4 etc), axle type, suspension type and installation brake system, tyre size and GVM/GCM ratings the same as that offered by the manufacturer for an equivalent model?	Y	N
2.2	Has the vehicle been shown to comply with the requirements of applicable Code G checklists of this National Code of Practice?	Y	N
<b>3.0</b>	<b>Welding</b>		
3.1	Is the welding in accordance with this National Code of Practice or the manufacturer's recommendations?	Y	N
3.2	Is all the welding performed by a suitably qualified tradesperson?	Y	N
<b>4.0</b>	<b>Driveline</b>		
4.1	Is the design and installation of the driveline capable of transmitting the maximum driveline torque and rotating at the maximum driveline speed without causing any undue vibration or reduction in working life of any component?	Y	N
<b>5.0</b>	<b>Heat Treated Frame Rail</b>		
5.1	When establishing the size of additional reinforcement has allowance been made for the reduction in material strength due to welding?	Y	N
<b>6.0</b>	<b>General</b>		
6.1	Does the modified vehicle comply with all the requirements of the applicable ADRs?	Y	N
6.2	Does the modified vehicle satisfy the requirements of the State or Territory Regulations?	Y	N
6.3	Is the quality of workmanship to a satisfactory standard?	Y	N
<b>7.0</b>	<b>Records</b>		
7.1	Have all of the modification details and all calculations applicable to the modification been recorded in accordance with this Modification Code?	Y	N

If the answer to the question 2.1 on Vehicle Specifications is "NO" then the modification may be acceptable provided that the additional analysis which justifies the change in vehicle specification proves satisfactory.

Vehicle Chassis No/VIN: \_\_\_\_\_

Vehicle Modifier: \_\_\_\_\_

Examined By: \_\_\_\_\_

Company: \_\_\_\_\_

Certification Officer No: \_\_\_\_\_ Mod Certificate No: \_\_\_\_\_

Modification Plate No: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_