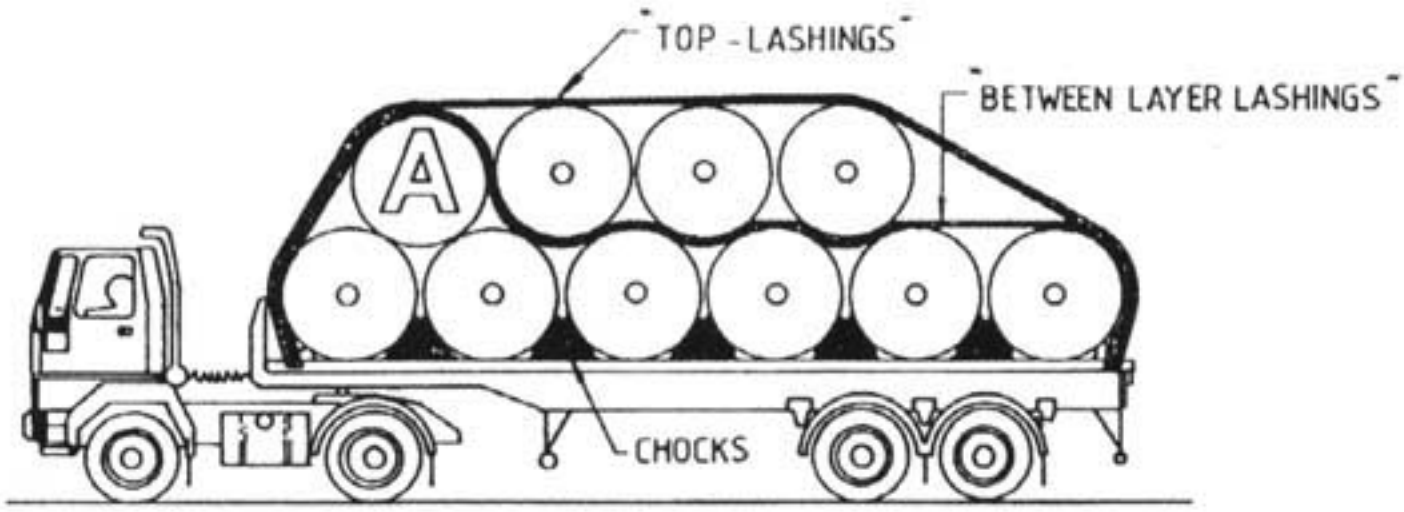
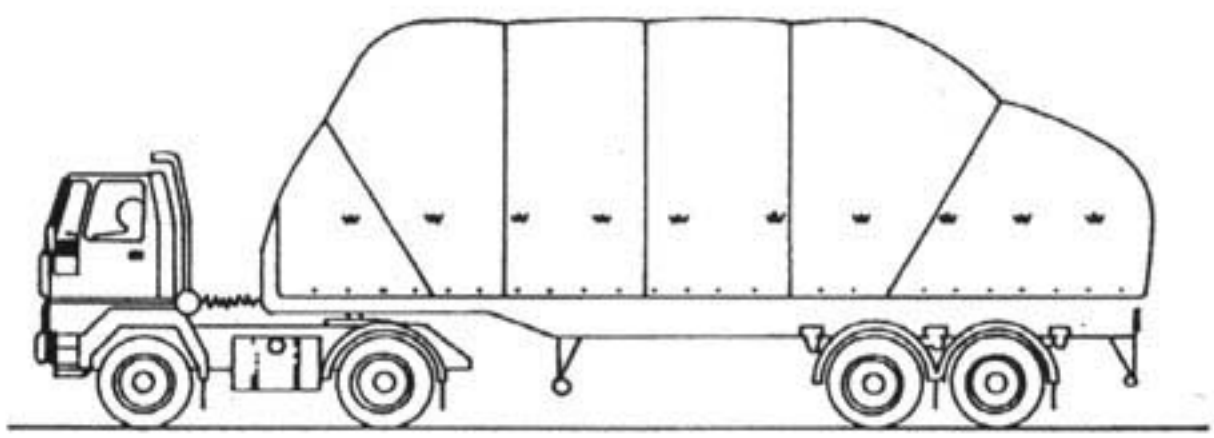
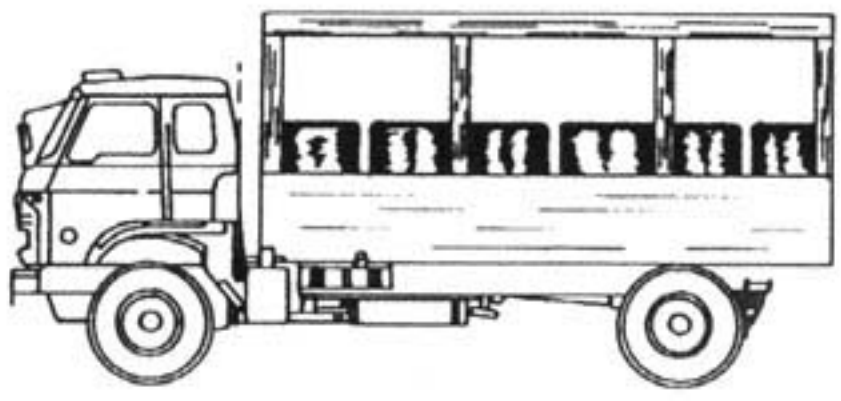


ROLLS - BOTTOM LAYER SECURED BY CHOCKS. ROLL 'A' THEN LOADED AND "BETWEEN LAYER LASHINGS" THEN LAID OVER 'A' AS SHOWN. SECOND LAYER SHOULD THEN BE LOADED, AND BOTH "TOP - LASHINGS" AND "BETWEEN LAYER LASHINGS" TENSIONED AND SECURED.



WHOLE LOAD SHOULD THEN BE COVERED WITH SHEETING TO PROVIDE ADDITIONAL LATERAL RESTRAINT AND WEATHER PROTECTION



DRUMS CONTAINING LIQUID OR LIQUIFIED MATERIAL SHOULD BE STOOD ON END WITH SUITABLE PACKING IF NECESSARY TO PREVENT MOVEMENT

TRANSPORTING ROLLS AND DRUMS

DIAGRAM 3.2.5

iv) Drums with liquid or liquefied material should be stood on end, as shown in Diagram 3.2.5, to reduce the chance of spillage occurring. If open platform vehicles are used, drums must be lashed together to prevent lateral movement and cross lashings applied across the drums to secure the drums to the platform floor. For sided vehicles, drums should be stood one against the other and if necessary suitable packing used to prevent any movement. Double or multiple layers of drums should be avoided unless lashings or similar can be used to firmly secure the upper layers in place.

3.2.7 As shown in Diagram 3.2.6, boxes must be loaded so that they are prevented from moving in any direction and in this respect: -

i) boxes should interlock if possible;

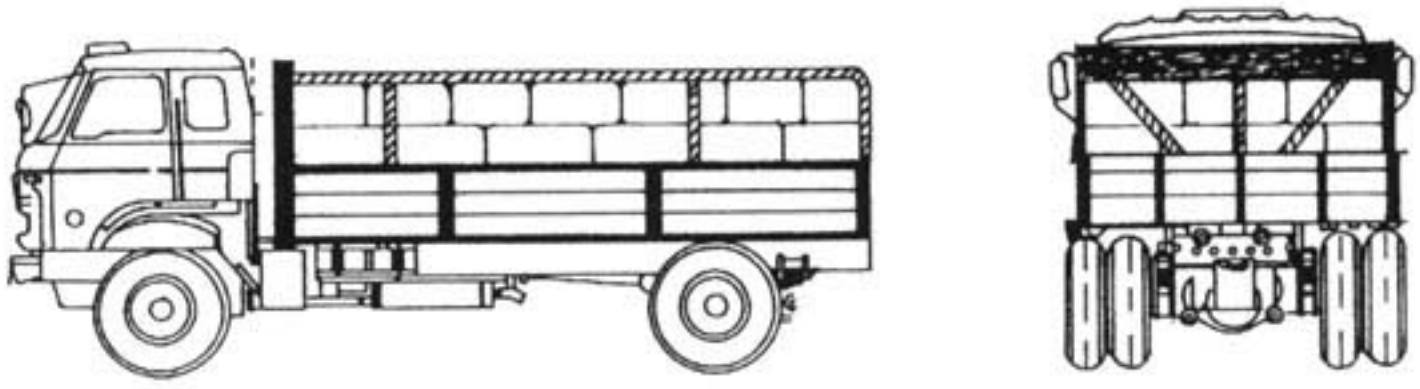
ii) boxes should be loaded to a uniform height;

iii) heavier boxes should be at the bottom of the load;

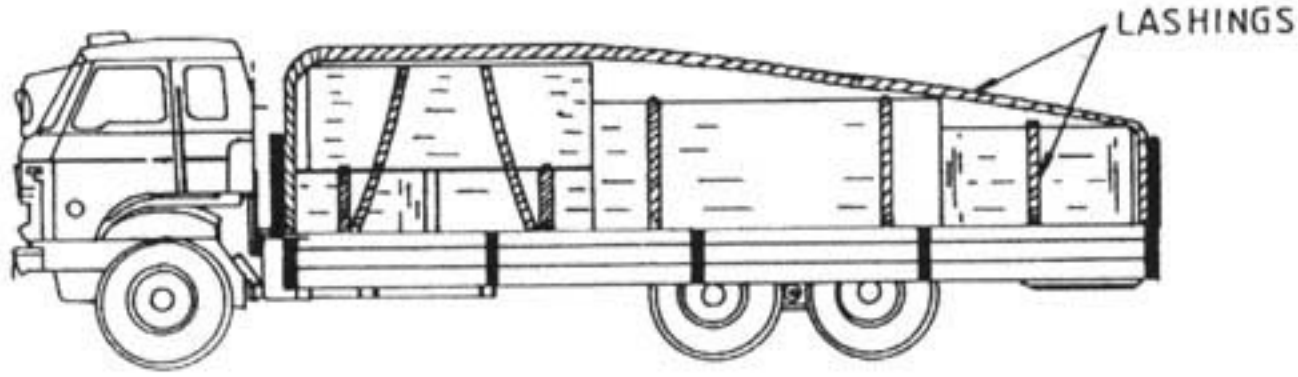
iv) there should be at least one lashing for each row of boxes across the vehicle;

v) any box which is above the general height of the load should have at least one cross lashing;

vi) the load should be sheeted to provide further restraint and as a protection.



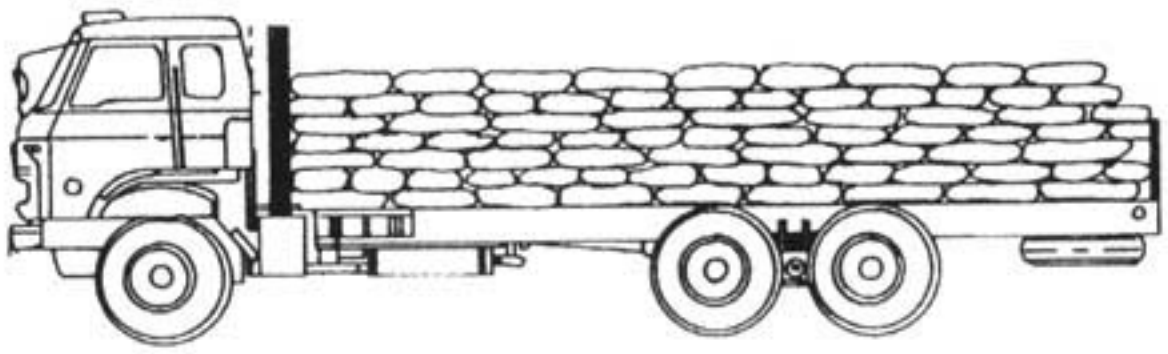
BOXES SHOULD INTERLOCK AND PREFERABLY BE COVERED



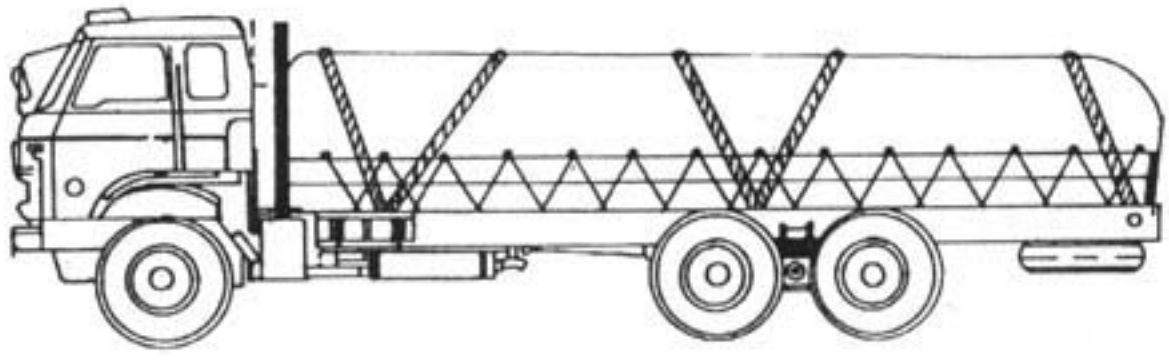
CRATES SHOULD BE SECURED TO FLOOR OF PLATFORM WITH AT LEAST ONE CROSS LASHING FOR EACH ROW, AND THE WHOLE LOAD PREFERABLY COVERED

TRANSPORTING BOXES AND CRATES

DIAGRAM 3.2.6

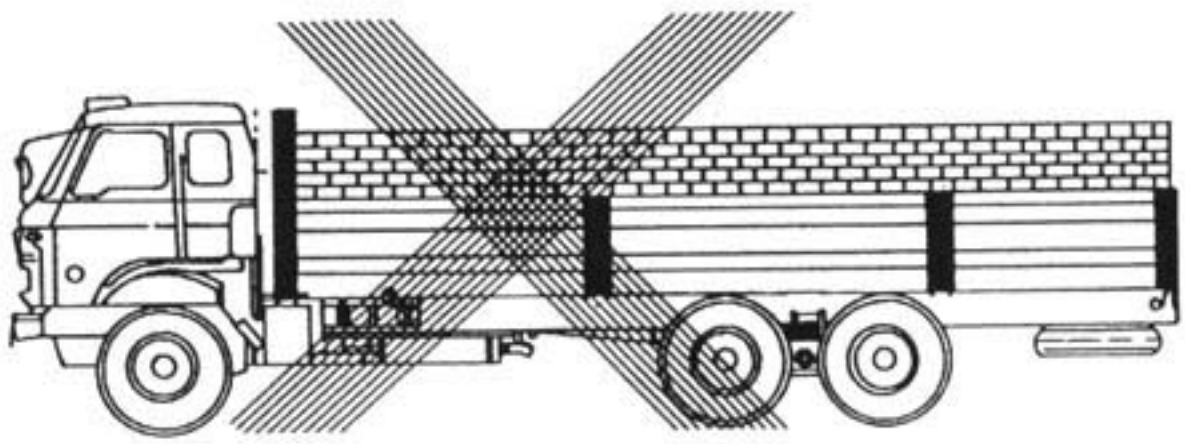


SACKS SHOULD BE LAID ON THEIR SIDES WITH ALTERNATE LAYERS IN OPPOSITE DIRECTIONS



THE LOADED SACKS SHOULD WHERE PRACTICABLE BE COVERED WITH A SUITABLE SHEETING AND THEN CROSS LASHED

NOT ACCEPTABLE



LOOSE BRICKS MUST <u>NOT</u> BE LOADED ABOVE THE SIDE OR TAIL BOARDS

<u>TRANSPORTING SACKS AND LOOSE BRICKS</u>

DIAGRAM 3.2.7

3.2.8 As illustrated in Diagram 3.2.7, sacks should be loaded in the following manner: -

i) where possible laid on their sides with alternative layers in opposite directions, but not more than two successive layers should be in the same direction,

ii) the load should be of uniform height whenever possible,

iii) the load should be sheeted and cross lashed,

iv) empty sacks must be properly stowed, and if not, in their compartment, securely restrained to the vehicles platform.

3.2.9 Loose bricks or similar must be restrained in respect of both the bulk mass of the load and the individual bricks or similar items. Providing the vehicle has load restraining sides, head board and tail board, additional restraint devices are not necessary if the load height does not exceed the height of the surrounding body, as shown in Diagram 3.2.7.

3.2.10 Sheet glass should normally be carried on purpose built vehicles having specially designed glass clamps and supports. Where sheet or plate glass is carried in crates similar precautions as for general freight should apply.

3.3 Metal loads

3.3.1 With metal loads the friction between individual items will generally be low particularly if the metal is oiled, and therefore this should be disregarded when assessing the total load restraint required. Similarly if the vehicle platform is wet or greasy, the friction between the load and the platform will be considerably reduced and therefore should not be regarded as providing any restraint. In fact where either the vehicle platform or the load or both are wet or oily, extra care will be needed to ensure that adequate restraint has been provided.

3.3.2 Where lashings pass over corners of the load, it will be necessary to ensure that the lashings will not be damaged by sharp edges.

3.3.3 Banding which is commonly used for binding other types of loads together is not suitable for metal loads, as it is difficult to ensure that the right type has been used and once loosened, there is no means by which the driver can re-tighten it.

3.3.4 Small, relatively heavy castings or similar, unless palletised, should be carried on sided vehicles whose head board, side boards, and tail board are sufficiently strong to withstand the forces generated when the vehicle is moving. It is preferable that the side and tail boards are higher than the load, and must be so if individual castings are stacked in layers.

3.3.5 Flat sheets should be laid flat on the vehicle platform taking into account the following:

i) where mixed sizes of sheet or plate are being carried the smallest should normally be loaded on top;

ii) oiled flat sheets should preferably be bundled and packed in unoiled steel sheets;

iii) lashings should always be in firm contact with the top surface of the load.

3.3.6 Long metal sections should be carried along the length of the vehicle, and it is essential that these are loaded such that the complete load forms a unit and no single item can move independently. In respect of the latter the following is relevant: -

i) As shown in Diagram 3.3.1, vehicles used should be sufficiently long so that the load can be carried in a horizontal position, without if possible extending beyond the rear or front of the vehicle.

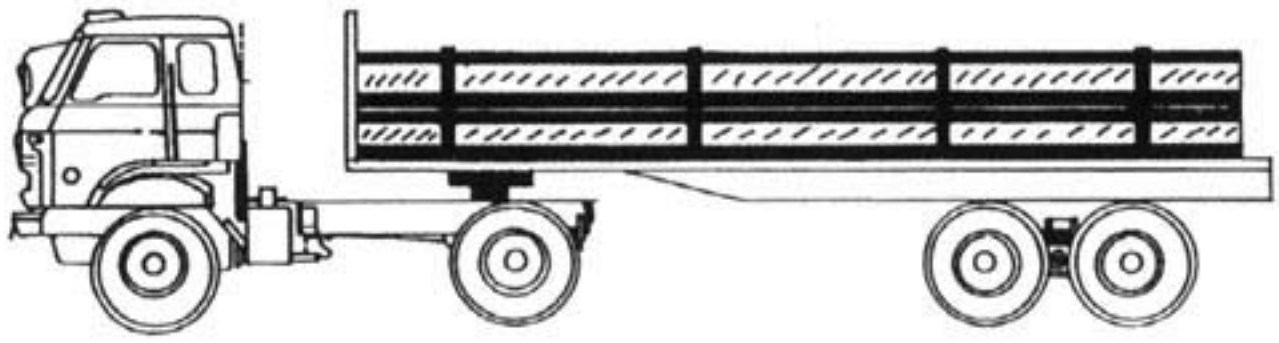
ii) Where a load does extend beyond the front or rear, then a long load permit will be necessary if the load extends by more than 1.4 m at the rear or 1.5 m at the front. Apart from any other considerations that may be applied long load permits will only be issued to vehicles over 9.1 m in length.

iii) Where head boards are required to support long metal loads, it should be ensured that the load capacity, both vertically and horizontally, of the head board is not exceeded. Loads supported by the head board will also need to have suitable trestles firmly attached to and along the platform of the vehicle in order to properly secure and distribute the load. Supporting the load only on the head board and the extended tail board, as shown in Diagram 3.3.1, is not acceptable and in fact the use of the tailboard to support any part of the load is not acceptable. The load must be securely lashed to the head board and the trestles such that any forward, rear or lateral movement is not possible. Using any part of the tail board as an anchorage point for the lashings is not acceptable.

iv) Long metal loads carried on the vehicle platform should be secured by lashings, preferably of the chain or suitable webbing type, which should in turn be attached to the vehicle by load anchorage points provided for this purpose. To allow a greater tension to be applied to the lashings, it can be advantageous to place a piece of timber at a convenient point between the lashing and the load.

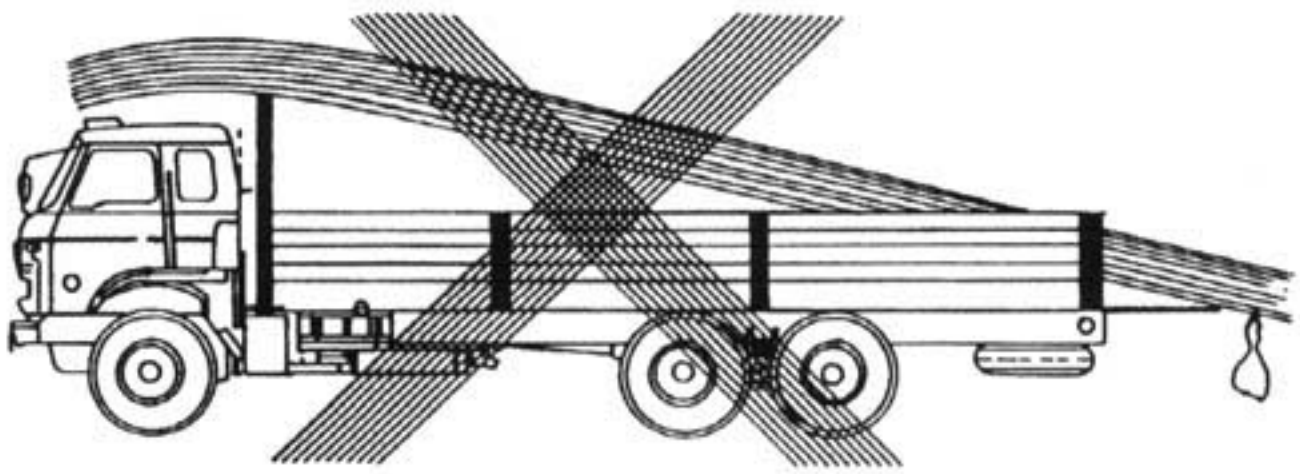
v) If the load is stacked, it should be kept as low as possible with the heavier items at the bottom and the lighter ones on top. No layer should be longer than the one underneath.

vi) To prevent forward movement the load should be placed in contact with the head board and securely restrained.



LONG METAL LOADS SHOULD BE TRANSPORTED ON SUITABLE VEHICLES WHICH ENABLE THE LOAD TO BE LAID FLAT WITHOUT OVERHANGING THE REAR OF THE VEHICLE

NOT ACCEPTABLE



LONG METAL LOADS SUPPORTED ONLY BY THE HEAD BOARD AND TAIL BOARD IS NOT ACCEPTABLE. WHERE LOADS ARE REQUIRED TO BE EXTENDED ACROSS THE HEAD BOARD, IT SHOULD BE ENSURED THAT THE LOAD CAPACITY BOTH VERTICALLY AND HORIZONTALLY OF THE HEAD BOARD IS NOT EXCEEDED. SUITABLE TRESTLES FIXED TO THE VEHICLE SHOULD BE PROVIDED TO SUPPORT AND DISTRIBUTE THE LOAD, AND PREVENT FORWARD OR BACKWARD MOVEMENT. SECURING THE LOAD TO ANY PART OF THE TAIL BOARD IS NOT ACCEPTABLE.
AN ACCEPTABLE ARRANGEMENT IS SHOWN IN DIAGRAM 3.9.1.

TRANSPORTING METAL LOADS

DIAGRAM 3.3.1

3.3.7 Large units and castings should normally be carried in purpose built cradles which must be sufficiently strong to withstand the forces likely to be imposed during the journey. The following factors should also be taken into account: -

i) For a satisfactory weight distribution, it may not be possible to place the load against head board and therefore securely fixed baulking to prevent any movement will be necessary as well as lashings.

ii) Because these loads are relatively high, lashings to prevent toppling will need to be pulled over the top or attached to points high on the load in addition to the baulking and lashings applied at the lower levels to provide the major part of the restraint.

3.3.8 Scrap metal should be carried in sided vehicles, with the tail board, side boards and head board being higher than the load. The load should be covered with either sheets or nets to prevent any of the metal from falling off.

3.3.9 Reinforcement rods over 15 m in length will require particular attention and most rigid vehicles will not be suitable as the rods would need to extend over and in front of the cab as well as extending to the rear. These extra length rods should be transported on articulated vehicles and laid flat longitudinally down the length of the trailer. Additionally as the load will exceed the permitted length a long load permit will be required.