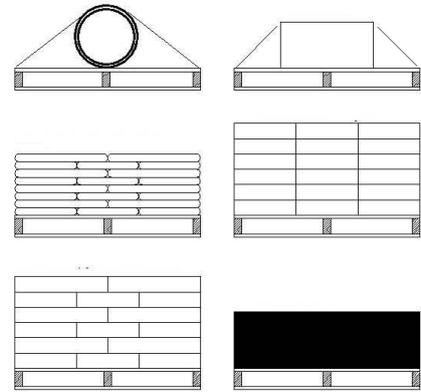


## Every pallet has more than one safe working load

If the pallet shown top left can safely just hold 1000 kg then the same pallet shown bottom right with a solid load might typically hold 2000 kg. The same pallet shown centre left and bottom left with interlocking payloads might typically hold 1500 kg and the pallet shown centre right might hold 1250 kg. These are all valid *safe working loads* or SWL and they are all on the same pallet.

Yet after testing the pallet to the current British Standard (ISO 8611), the results might give this pallet a *single nominal* test result of 1000 kg. At that point a given pallet without the user's payload on it has only one British Standard result called a *nominal load* or (*in previous standards*) - *rating*, namely its load capacity with a load carefully placed on its deck.



This British Standard test result is now called *nominal load* in the version 2011 standard; it is expressed in *kilograms*, and is determined by test and cannot be changed. For example a particular pallet might have a *nominal load* of 1000 kg. This will in the test have been determined in the weakest mode; this weakest mode might be when supported across the pallet length or across width. This will probably be on beam racking. The tests give a value for each, across length and across width; the weakest is required to be chosen.

The British Standard is based on the internationally agreed ISO 8611 and the *nominal load* is how different pallets are easily compared, it has become widely used for a quick comparison. In practice nevertheless, pallets are often loaded in such a way that the customers load being carried (the payload) contributes to the overall strength performance of the loaded pallet, for example interlocked sacks (shown centre left) do, as do interlocked boxes (bottom left). Therefore a given design of pallet is suitable for several different safe working loads and will have several different safe working loads depending on the nature of the particular goods on the pallet. This is fully accepted and defined in BS EN ISO 8611: *Pallets for materials handling - Flat pallets*

The pallet user who wishes to use the advantages of being able to use a load higher than the *nominal load* must ensure that during palletisation safe working loads are not exceeded. Account needs to be taken of strapping, shrink wrapping, and pattern layout of contents of boxes or sacks.

These relationship factors are described in BS EN ISO 8611 which became an EN (European) in 2012

BS EN ISO 8611-1: 2011 *Pallets for materials handling — Flat pallets — Part 1: Test methods*

BS EN ISO 8611-2: 2011 *Pallets for materials handling — Part 2: Performance requirements and selection of tests*

BS EN ISO 8611-3: 2011 *Pallets for materials handling — Flat pallets — Part 3: Maximum working loads*

Note that the safe loads here in Para 1 do not apply to all pallets, they are an example only

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