

Wet Pour Depth and Area Size

The following information is designed as a guide to help you assess the required depth and area size of wet pour safety surfacing required.

Depth of Surfacing

The depth of wet pour safety surfacing required is calculated according to the Free Fall Height (FFH) of any play equipment and the Critical Fall Height (CFH) of the surface.

The Critical Fall Height is the height from which it is assessed that the surface will absorb the impact of a child's fall sufficiently to reduce the risk of serious head injury.

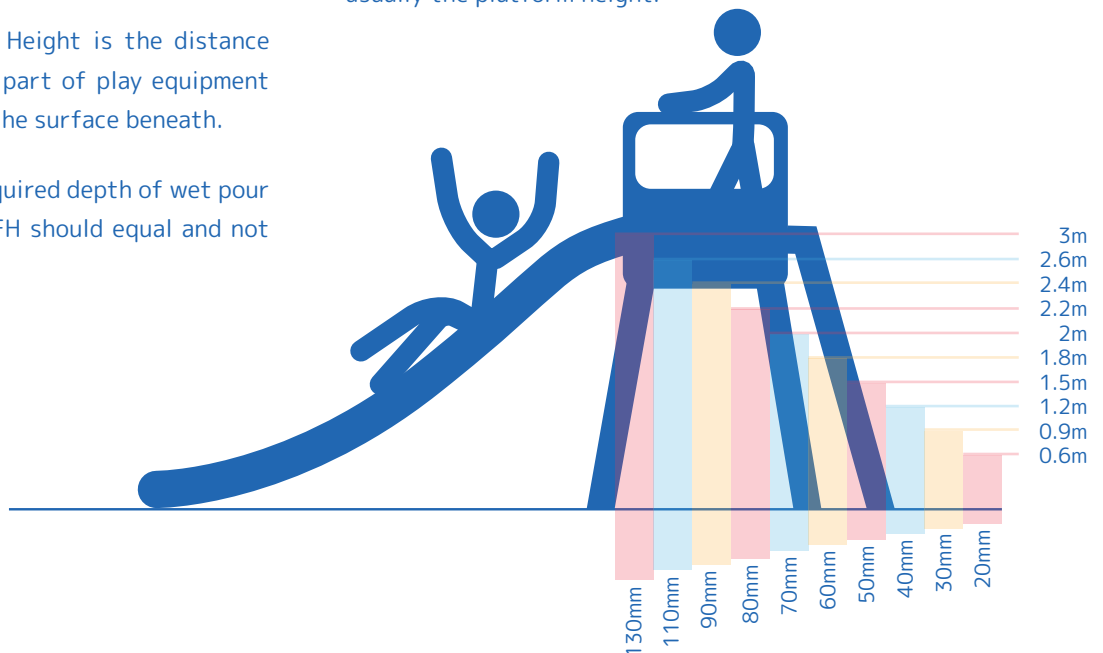
The Maximum Free Fall Height is the distance between any accessible part of play equipment (intended for play) and the surface beneath.

When calculating the required depth of wet pour safety surfacing, the FFH should equal and not

exceed the surfaces CFH. We can advise on these heights for any new or existing play equipment, however the general principle is detailed below.

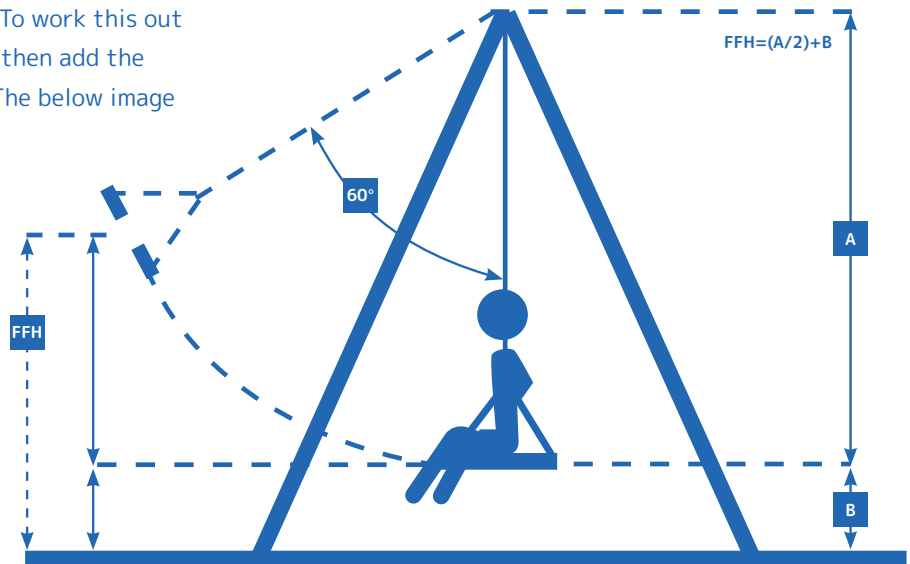
Stationary Equipment

For equipment which a child stands, the Free Fall Height is calculated from the highest point on the equipment which is intended for play – usually the platform height.



Swings

The FFH for swings is calculated from the centre of the stationary seat surface at 60 degrees. To work this out divide the length of the chain by 2 and then add the distance from the seat to the ground. The below image demonstrates this.



RTC Safety Surfaces have been tested according to British and European Safety Standards to the certified levels below:

Critical Fall Height (CFH)	0.6m	0.9m	1.2m	1.5m	1.8m
Thickness	20mm	30mm	40mm	50mm	60mm

Critical Fall Height (CFH)	2.0m	2.2m	2.4m	2.6m	3m
Thickness	70mm	80mm	90mm	100mm	130mm

It is important to note that if the sub-base is MOT Type 1 stone, the minimum depth which can be installed is 40mm

Area of Surfacing

The extent of surfacing required around play equipment is dictated by the height of any potential fall.

Stationary Equipment

For stationary equipment with a Free Fall Height (FFH) between 0.6m and 1.5m, surfacing should extend at least 1.5m beyond the edge of the equipment. To calculate the surfacing distance for equipment with a FFH of over 1.5m – take 2/3 of the FFH and add 0.5m.

Swings

To calculate the length of surfacing to the front and back of the swing, multiply the length of the chain by 0.867 and then add 1.15m. The width of surfacing required for seats no greater than 500mm wide is 1.75m (i.e. 0.875m each way from the centre of the seat).

For swings with seats wider than 500mm the difference between the seat width and 500mm must be added to the 1.75m (50% each side of the centre of the swing seat). Please note that areas for 2 seats in one bay may overlap providing the distance between seats is 20% of the swing chain +300mm.

Should you require any advice with regards to the depth or area size of surfacing required, please get in touch.

Free Fall Height (FFH)	Surface Distance (Minimum Requirement)
1.5m	1.50m
1.6m	1.56m
1.7m	1.63m
1.8m	1.70m
1.9m	1.76m
2.0m	1.83m
2.1m	1.90m
2.2m	1.96m
2.3m	2.03m
2.4m	2.10m
2.5m	2.16m
2.6m	2.23m
2.7m	2.30m
2.8m	2.37m
2.9m	2.43m
3.0m	2.50m