



**Fire Resistance of WS according to DIN 4102**

**a) Dowels**

**F 30: (= 30 minutes of fire resistance)**

increase edge and end distances by 10 mm in all directions.

**F 60: (= 30 minutes of fire resistance)**

increase edge and end distances by 30 mm in all directions.

1) if dowels are hidden (dowel holes plugged): same load carrying capacity as "cold case"

2) if dowels are not hidden: reduction with complicated formula required.

→ whenever possible, plug the dowels

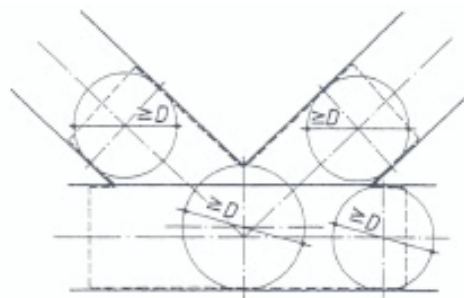
**b) steel plates:**

1) edges to cover with 10/30 mm of wood (F 30 / F 60)

2) edges not covered/ protected: requirements on minimum measure D for steel sheets are as follows:

	plate edge on one side or on opposite sides not protected	plate edge on two non opposite sides not protected
F 30	120	200
F 60	280	440

Both cases for plates and dowels may be combined.



These indications are without any guarantee, code changes may also be possible.