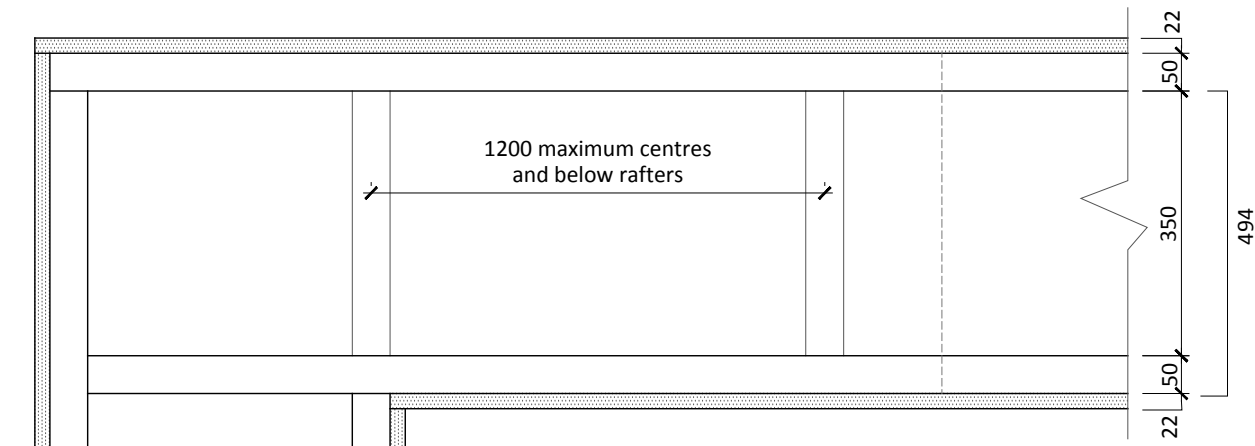


# Roofplate Corner Detail



### Roof Plate construction:

50x150mm or larger C16 softwood sawn untreated timbers, with 50x150mm C16 softwood timber noggins at 1200mm maximum centres and below every rafter. On gables, place noggins below any vertical posts; timber sizes and specification subject to Structural Engineer confirmation

18mm SmartPly, Egger board HDX or Elka Strongboard to top and bottom faces of box beam; all voids to be fully filled with sheep wool or equal approved insulation prior to fixing top face of SmartPly

SmartPly to be formed as 1220x1540mm L-shape at corners of box beam

22mm wood fibre board to inside and outside faces of box beam as airtight layer and to provide substrate for clay plaster/lime render

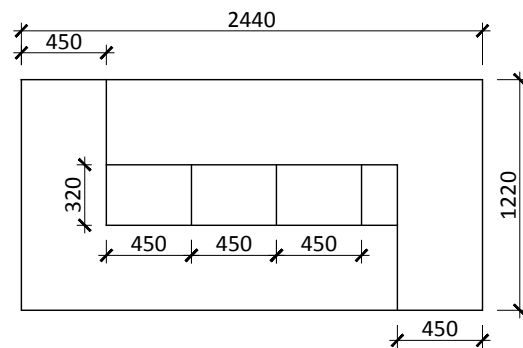
### Door/window posts:

Door/window post with noggin either side

Door and window posts to be restrained at head with 50x150mm C16 noggin fixed vertically either side

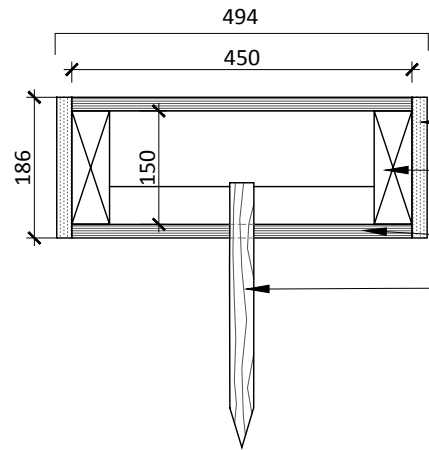
Posts may be fixed permanently to noggins after full compression of straw bale wall

SmartPly lid not to be fitted above posts until compression is complete and posts have been cut to length and fixed to noggins



Cutting corners from Smartply Sheet

# Roofplate Section



22mm wood fibre board to inside and outside faces of box beam

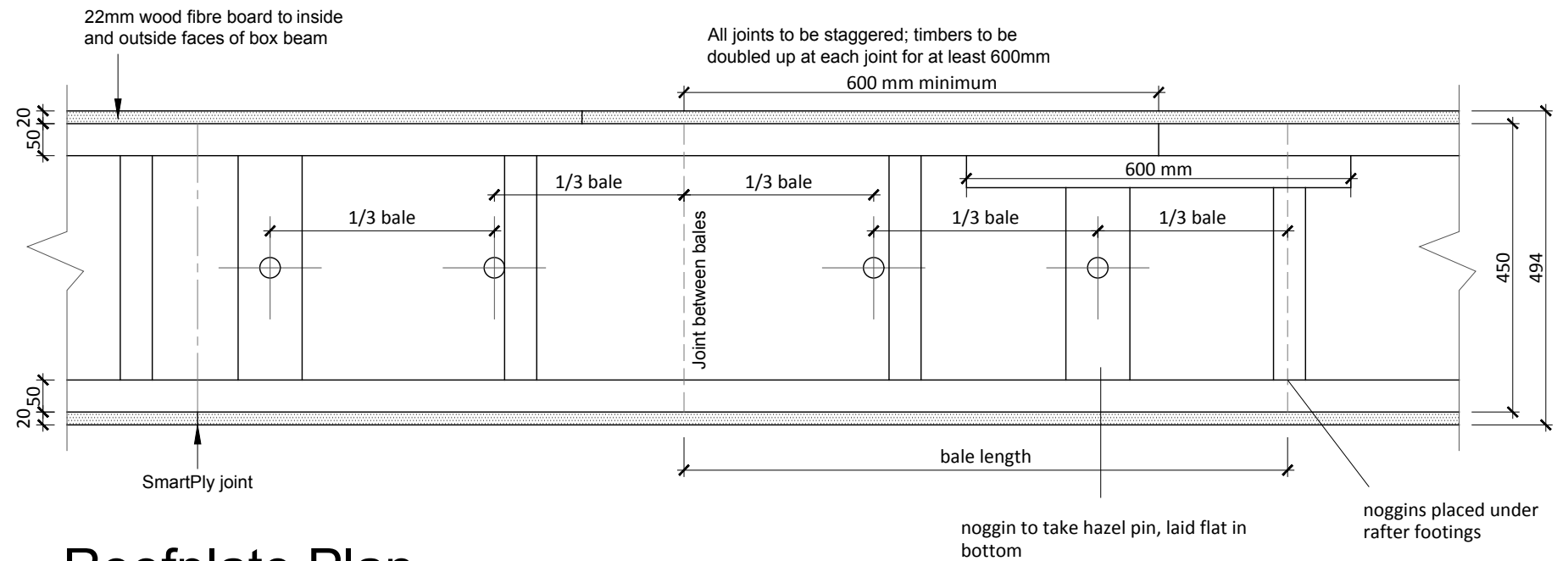
50x150mm C16 or larger

18mm SmartPly or egger board HDX or Elka strongboard to top and bottom faces

32mm diameter Hazel pin through bottom of box beam: allow 2no. pin per bale

Use 350mm pin if 1no. bale below; use 1000mm pin generally. Hazel pin spacing subject to bale plan

Note: Where roof is built first, hazel pins may not be required.



# Roofplate Plan

### General Notes:

All joints in timber and SmartPly to be staggered and at least 600mm apart.

Timber sizes relate to size of openings below & load being carried. May be up to 250mm. Fitch beams may be required over openings or timber may need to be doubled up for extra strength.

SmartPly to be glued with Cascamite and nailed with ringshanks top and bottom. all boards to be exterior grade.

Wood fibre board to cover all joints to create air tight layer and form substrate for clay plaster/lime render.

Do not joint timber directly above an opening below. All timber sizes should be verified for strength by a competent person before construction.

### Hazel pin Location:

Holes for hazel pin to be located approximately at  $\frac{1}{3}$  points of each bale, 2no. pin per bale. Where this falls close to a noggin, move hole next to noggin.

Where hole falls between noggins, add extra 100x50mm noggin laid flat on bottom of box with hole through for hazel.

Hazel can be inserted through SmartPly only, as long as it is next to a noggin. Where hazel is not next to noggin, it must also go through a flat noggin on base of box.