

Condition 3 – Radon barrier installed to floor slab

Tai Tarian Ltd		terrafirma
Executive Summary		
Site Location and Proposed Development	The development site is approximately triangular in shape and locates to the west of Llys Wern. The site centres on an approximate National Grid Reference of 274370 198620, occupying a plan area of approximately 0.30 Hectares. Tai Tarian Ltd is proposing the development of three residential houses.	
Site History	Since the earliest map edition the site has remained undeveloped field land or public open space. By 1965 historical map evidence shows the development of residential housing to the east and south of the site.	
Geology	The 1:10560 scale geological map of the area (SS79NW) was consulted for geology underlying the site. The site is shown to be underlain by the South Wales - Upper Coal Measures Formation which is Carboniferous in age. The rocks comprise mudstone, sandstone and siltstone with seatearth and coal. Superficial deposits are recorded as Till with an anticipated thickness of 1.00m. Made ground associated with the development of adjacent structure is expected at the site.	
Radon	Basic radon protective measures are required for new developments on the investigation site.	
Coal Mining Risk Assessment	The overall risk to the surface stability of the site from possible recorded and unrecorded workings is considered to be Low.	
Ground Conditions	Made ground comprising firm locally stiff friable dark brown clayey silt or silty clay was seen to a maximum depth of 1.00 and overlies firm orangish brown clay and medium dense sand.	
Laboratory Chemical Testing	Arsenic was recorded to exceed guideline values in all four samples taken. Asbestos in the form of Chrysotile was identified in one sample from trial pit TP01 at 0.30m depth.	
Foundation Solution	It is recommended that mass concrete strip or trench fill foundations be used; founded within the firm orangish brown CLAY at a depth of approximately 0.30m to 1.00m. An allowable bearing pressure of 100kN/m ² may be used. All foundations must sit at least 200mm within the founding horizon. For the given foundation solutions and bearing pressure, maximum total settlements of 25mm should result with differential movements of the superstructure not exceeding 1:750. In order to prevent damage from the shrinking or swelling of the soil, and the effects of frost heave/and or thermal shrinkage foundations/edge beams should be taken down to a minimum depth of 900mm when founding in clay. All foundation formations should be inspected by a suitably qualified Engineer before being concreted.	



Images showing the installation of the radon barrier

Condition 8 – Bat boxes Installed to Plot 2 & 4



Traditional Bat Box

- Designed for small crevice dwelling bats especially pipistrelles.
- Grooved landing ladder continues internally.
- Precision cut FSC certified panels for dry, draught free, long-lasting box.
- 20mm entrance slot to deter birds but suits small bats.
- Available either as a single chamber or with an internal divider (double chamber).

Description	Specification
Our Traditional Bat Box is designed for those bat species which would naturally roost in crevices. It is especially suitable for both Common Pipistrelles and Soprano Pipistrelles. These two species are the most abundant bats in the UK and most frequently use bat boxes. This bat box is available as either single chamber or double chamber. Externally these bat boxes are identical but internally the double chamber has a divider which creates two parallel roost spaces within the box. Designed taking into account our 12 years' experience of making batboxes, with the benefit of customer feedback, the latest scientific thinking and advice from experts on British bats. The key features include: 📏 20mm entrance slot is ideal for bats but deters birds. 🔒 Close fitting panels and roof (precision cut by computer controlled equipment) for restricted airflow and improved heat retention. 🪜 Bat ladder at base of box continues inside box to ensure bats find it easy to access and move around within the box. 🔧 Easy and safe to erect box on walls or trees - light weight with 2 screw holes for mounting. 🔧 Easy (1 screw) to remove roof for cleaning or inspection where permitted 🌲 Manufactured in exterior grade FSC Certified European birch plywood Bat boxes can be mounted on both buildings and trees. Try to position your box as high as possible in a sheltered sunny place. Ideally, several boxes should be put up facing in different directions to provide a range of conditions. Bats need time to find and explore new homes, and it may be several years before boxes have residents – be patient!! Droppings on the landing area, stains around the lower parts of the box and chittering noises from inside on warm afternoons and evenings are signs of occupation.	



Image showing bat box to plot 2



Image showing bat box to plot 4