

## St Leger Homes of Doncaster - Compartment Walls - Option Appraisal

Option	Description	Fire Resistance	Demountable?	Aesthetics	Design Life/Maintenance	General Comments	Further Information
<b>Option 1 - Rendered Blockwork</b>	Rendered blockwork walls as per the previously submitted proposal to St Leger Homes of Doncaster	Surpasses the requirement in the brief to achieve 30 minutes fire resistance.	The option is not demountable.	White rendered blockwork walls.	The proposal will exceed the 30 years set out in the brief, maintenance will include potential longer term cyclical render/masonry repairs.	Rendered blockwork walls exceed the 30 minutes fire protection and surpass a design life of 30 years set out in the brief. The option however is not demountable and it would be difficult to remove should residential units require relocation in the future.	Refer to previously submitted proposal to St Leger Homes of Doncaster
<b>Option 2 - NoiStop Acoustic Wall</b>	Primarily used for its noise reduction properties NoiStop acoustic wall consists of a core of specially pressed stone wool which is water-repellent and UV resistant. This material is designed for maximum sound absorption and sound insulation. There are two types: NoiStop Green and NoiStop Wood.	Achieves Fire Class A1 (EN 13501 - 1). Please note the product information states the wool within the product achieves 60 minute fire resistance, however it has been confirmed with the supplier the product as a whole has not been evaluated for its fire class.	The option is demountable, panels can be removed. Supporting posts are embedded in the ground.	NoiStop Green and NoiStop Wood options have aesthetic finishes, refer to link for example installations and images.	The expected lifespan of the NoiStop acoustic wall is more than 20 with a 5 year warranty period. The manufacturer states the product is maintenance free.	NoiStop products are demountable and have good aesthetic value with an expected lifespan of over 20 years. As the product is primarily used for its noise reduction properties the fire class of the entire system has never been a primary product focus and is therefore has not been evaluated by the manufacturer.	<a href="https://www.mobilane.com/en/products/noistop-acoustic-barrier-fencing/">https://www.mobilane.com/en/products/noistop-acoustic-barrier-fencing/</a>
<b>Option 3 - Flametek Fence Systems</b>	Fire rated fencing designed for commercial, industrial, and residential use.	The FlameTek™ boards have been fire tested to AS1530.1, 1530.2, 1530.3 and are BAL-FZ rated. The board has also been tested in a walling application to AS1530.4 and achieves a 60/60/60 fire rating which means it has a 60 minute certification.	The option is demountable.	Poly-TekFlameTek Fence Panels are a single skin MgO (Magnesium Oxide) board. Each board features a woodgrain texture on one face and a smooth finish on the other. Refer to link for images.	Warranty – 10 Years Manufacturer's warranty on board. In Factory Coating warranties are dependent on the desired coating however most carry a 7 year warranty. Expected lifespan over 20 years.	<b>The company is based in Australia and unfortunately this product is not available in the UK.</b>	<a href="https://www.polytek.com.au/fire-rated-fencing/">https://www.polytek.com.au/fire-rated-fencing/</a>
<b>Option 4 - Oak Sleepers &amp; Steel Posts</b>	Often used in agricultural settings, Oak Sleepers may be inserted between steel I beams in order to provide a retaining wall.	Oak has some degree of natural fire resistance due to a charring effect however no system as a whole could be found that has been tested for fire resistance capabilities and is commercially available.	The option is demountable, sleepers can be removed. Supporting posts are embedded in the ground.	Natural timber finish between steel supports. Refer to link for indicative appearance (Pine sleepers used in example).	It is estimated an oak sleeper wall system would last in excess of 20 years with minimal maintenance. Periodic painting/treatment of steel would be required.	A fully designed system as a whole has not been found with limited information available on fire resistance properties. (Further information link for indicative aesthetic appearance).	<a href="https://www.easternsleepers.com.au/treated-pine-sleepers/">https://www.easternsleepers.com.au/treated-pine-sleepers/</a>
<b>Option 5 - Concrete Post &amp; Panel Fencing</b>	Post and Panel Fencing comprises heavy-duty slotted posts and infill panels that have a shiplap finish to the front face.	The fencing system is primarily used for its noise reduction properties and is not generally specified for fire performance.	The option is demountable, concrete panels can be removed. Supporting posts are embedded in the ground.	Pebble dash finish. A mix of salmon pink, grey, brown, white and black stone. Refer to link for photos.	It is estimated the Concrete Post & Panel Fencing system would last in excess of 20 years with minimal maintenance.	The Concrete Post & Panel Fencing is a standard system and readily available, the system is demountable and should last in excess of 20 years with minimal maintenance. Product has primarily been used for its noise reduction properties and is not generally specified for fire performance.	<a href="https://allenconcrete.co.uk/fencing/concrete-post-and-panel-fencing/">https://allenconcrete.co.uk/fencing/concrete-post-and-panel-fencing/</a>