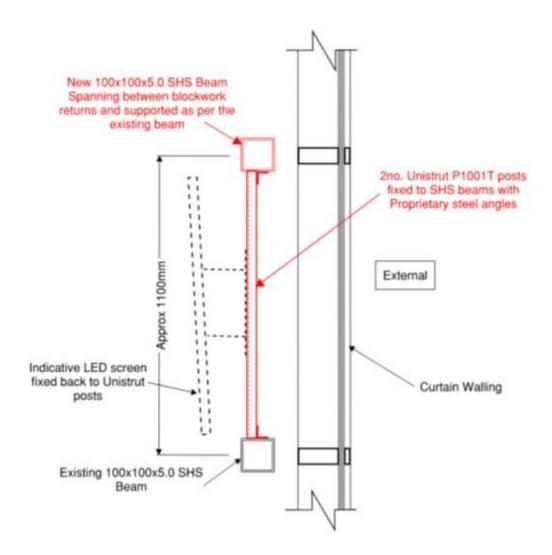
## Surveys and structural works in places of worship

Over the past 6 months our surveyors and structural engineers have found themselves in a number of intriguing properties of all ages and sizes with one thing in common – they are all places of worship. From churches to jamatkhanas, they all have their own quirks and particular considerations.





Our surveyors and structural engineers are experienced in assessing period buildings and buildings that have a variety of different functions. Nevertheless, no matter how many times we carry out surveys of places of worship, it is always a privilege to get an insight into these fascinating properties.

Much of our recent work has involved carrying out <u>building surveys</u> of religious buildings, including gurdwaras, churches and jamatkhanas. A recent example is a <u>commercial building</u> <u>survey</u> of a baptist church in <u>Nottingham</u>. This was undertaken to allow the client to understand the condition of the property, and to assist with prioritising works and improvements. This was a substantial property, dating back to 1912, and was surveyed over a period of 2 days.

The church was structurally sound; however, as with any property of this age and size, wear and tear was noted. We were able to advise our client regarding the works and proactive maintenance needed to bring the building into a good state of repair.

We identified structural defects in the roof that were allowing water ingress and we recommended repairs that needed to be prioritised and carried out within the next year; this would require a budget of around £25K. This would prevent further water damage and internal damp issues. Other works that should be prioritised included repairs to the gutters and windows.

In the mid-term we noted that general repairs to the pointing, brickwork and coping stones would be required, and we advised our client to set aside £18K for these works. Further requirements for repairs and maintenance in the mid-to-long term were noted, including cleaning the stonework (£12K) and electrical repairs (£3.5K).

Another recent request has been to conduct building surveys of 12 jamatkhanas across the UK. Our client wished to fully understand the costs and liability associated with the buildings. We have therefore undertaken full structural surveys of each property, with the addition of an asset project report for each one. These asset reports provide a life cost analysis for each site, projecting and breaking down the costs associated with maintaining the buildings for the next 50 years.

<u>Structural engineering assessments</u> are also a very common request. Recently, these have included a <u>structural design review</u> of plans for a new church balcony (see **case study**), and a load assessment of existing timber roof purlins to confirm whether a large format display and lighting could be suspended from them. For the latter project, we prepared a report with accompanying <u>structural calculations</u> which clearly set out the load capacity of the existing roof purlins, and identified various options for fixing suspended loads to them. We also considered potential twist on the supporting beams, and produced designs for the installation of an additional steel beam to prevent twist.

Next up is a <u>feasibility assessment</u> for development of a Grade II listed church in <u>Birmingham</u> to improve its accessibility and increase the usability of the space. Watch this space...