



Construction of offices and the boiler and plate shop

This building to the west of the Robert Stephenson & Co offices at 20 South Street was the last extension to the Works constructed during Robert Stephenson's lifetime. The exact date is unclear but was most probably built in stages from the mid 1840s. It was originally a 2 bay shed or shade open on one or more sides and offering only a minimum of protection from the elements. The date would make it contemporary with the building of the Central Station and there are elements that are common to Robert Stephenson's prevalent design practices in passenger train shed roofs. Most notably these include a multi-pitched roof resting on cast iron pillars some of which act as drain pipes, and continuous gazing in the roof to give maximum natural light. Artificial light at this time would have been, at best, at a very low level.

The workshop as it exists now has a maximum length of 40 m (132 ft) and a total floor area of 1600 m² (17,000 ft²) including the early twentieth century addition of the mezzanine floor adjacent to the first floor of the offices.

[Sketch of works before renovation, showing roof structure](#)

The adjoining office block was added a few years later and the opportunity taken to extend the shed by adding 2 more bays on the eastern side, each slightly narrower than the original ones and giving the offices a frontage on to South Street. The additional bay between the offices and the original structure would not have included the mezzanine floor when built. The western wall, supporting part of the new timber and glass bay, and the southern wall of the offices are of thick stone rubble construction typical of the period. The eastern frontage is of relatively thin brick construction.

[Sketch of South Street frontage](#)

The offices are built in late Georgian style, with sliding sash windows of 3 x 4 panes with narrow glazing bars, possibly a personal preference of Robert Stephenson. The semi-circular turret for the main staircase is an unusual style for Newcastle and again may have arisen from Robert's experiences as a student in Edinburgh where it is a common characteristic. There is some evidence that the buff firebricks used for the eastern façade of the building came from Edward Pease's brickworks in Crook. The roof covering is Welsh slate.