

## Roofing



View onto asphalt roof in Uzbekistan.



Individual house in the country with sheet metal roof.



The problem blocks — first-generation

# TAKING RUSSIAN LESSONS

**Jonathan Charley looks at the Soviet experience with system building.**

ONE thing that the recent events of the Soviet Union have clearly shown is the danger and misjudgement implicit in the portrayal of the USSR as one enormous homogenous country.

The scenes in the Baltic and Transcaucasian republics have underlined the great differences that exist not only geographically but in terms of language and culture.

There are some things, though, that all the nations and ethnic groups have in common. One of these is roof construction and more generally the problems resulting from the introduction in the late fifties of prefabricated concrete panel construction.

A trip from Moscow to Irkutsk in the far east will take you past the gold leaf and timber onion domes of the Orthodox Russian church, on to the glistening blue ceramic domes of the mosques in the Asian republics. But greater difficulty can occur in locating yourself geographically when wandering out into the post-war residential areas of large urban centres be they in Irkutsk, Samarkand or Moscow.

From the late 1950s the building industry, especially in the housing sector, took the decision to industrialise the building process on a scale unknown in the West. Whether on the Arctic Circle or the Afghan border, the eyes will be met by virtually identical housing schemes, the products of forty years of system building — building which pays no real attention to climatic and cultural differences. However, unlike the Western experience which saw the rejection of prefabricated concrete

construction in housing, the Soviets remain committed to its further development, such as that in Moscow more than 90 per cent of new housing is in the form of large panel twenty-storey tower blocks. But this is matched by an ever-increasing proportion of capital investment in housing being devoted to rehabilitation and maintenance. In Moscow this has reached somewhere in the region of 50 per cent. One of the principal problem areas lies in what to do with the first generation of five-storey "Krushchev" blocks built at the end of the fifties and the beginning of the sixties.

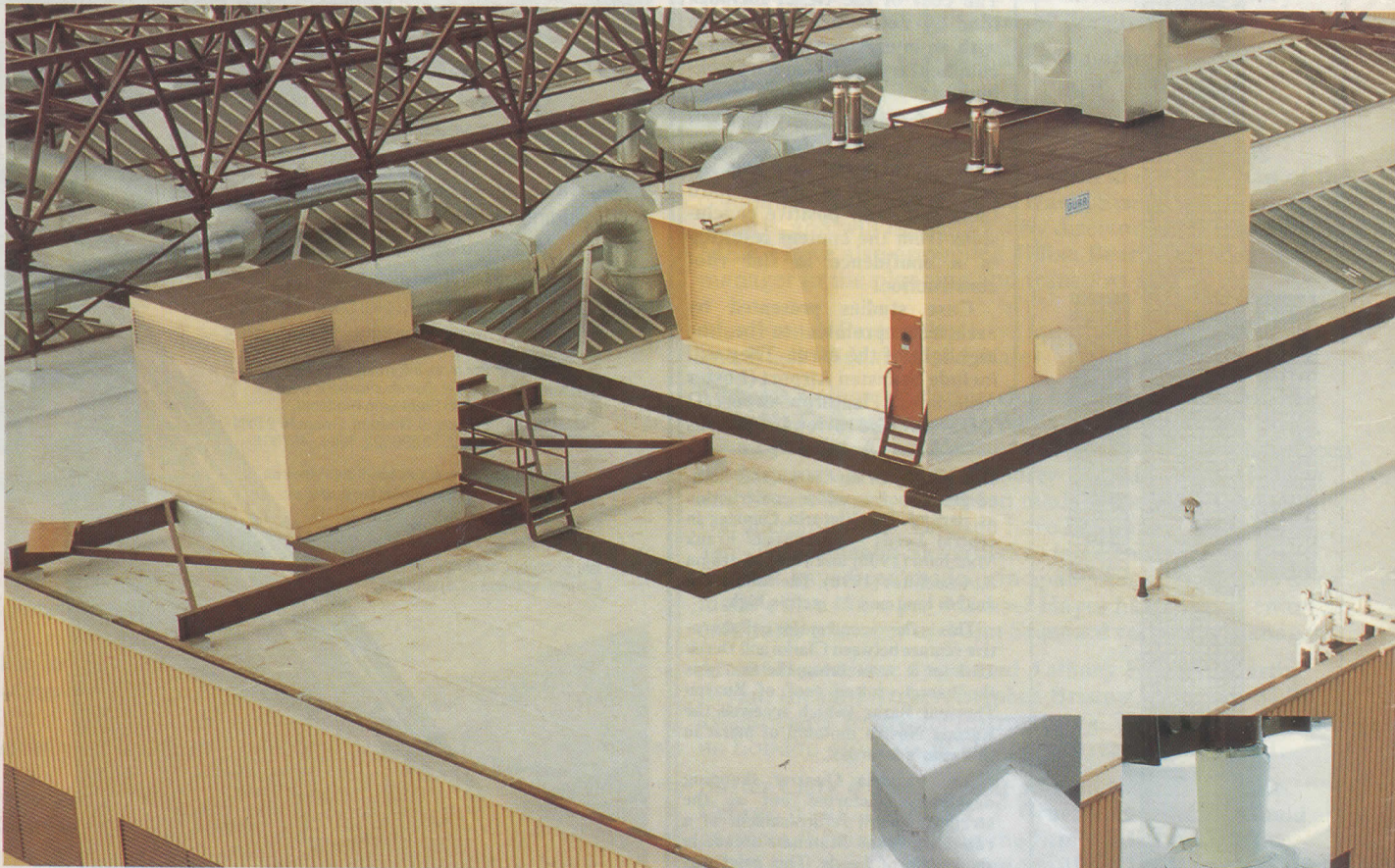
As the inhabitants become more vociferous about the increasing dilapidation of these properties — leaking roofs, poor sound insulation, no lifts, inadequate waste disposal and sanitation are just some of the complaints — the building industry and associated professions are faced with the dilemma of whether to demolish or rehabilitate these buildings that constitute about 8 per cent of the national housing stock.

Where the Soviet Union does not have any great problem is in the availability of natural resources for the manufacture of roofing materials and building components. With the exception of roofing tiles and slates, the Soviet building industry is a major manufacturer of all kinds of roofing felt, bitumens, asphalts, impregnated roofing slabs, zinc, corrugated and other sheet roofing materials.

As for the particular blocks in question, they have either a low pitched sheet-metal roof or a flat, felted-asphalt roof. While roofing technology has improved on the new multi-storey tower

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Technical block K, Heathrow. Courtesy: British Airways.  
Roofing contractor Robseal Ltd.



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**Sarna**

This junction of new to old Sarnafil roofing was made seven years after the original installation. The original material is still totally weatherproof and flexible and the lap joint is perfect.

This bellows flashing allows a constant vertical movement of 150mm for the gantry it protects.