Straw homes are typhoon proof

By Brian Gomez

A Melbourne-based company, Ortech Industries, has finalised plans to export to the Philippines its expertise in production and use of strawboard panels for construction of low-cost housing.

Ortech's managing director, Mr Derek Layfield, told *International Business Asia* that following two years of research and development Ortech has designed a house suitable for the Philippine environment.

It will utilise strawboard panels made in the Philippines from rice straw, a waste product. Plant and equipment for the 'Easiboard' product will be exported from Ortech's manufacturing facility at Bendigo in Victoria.

Ortech, which was incorporated in April 1985, conducted a management buyout in 1991 of Stramit Ltd from the BTR/Nylex Group. Stramit had been involved in manufacture of strawboard products.

The low-cost housing application was developed after an initial inquiry from the Philippines. It has since received the endorsement of the Housing and Development Coordinating Council in the Philippines.

Mr Layfield said he hoped to have three strawboard panel plants in operation in the Philippines within the next 12 months.

Ortech will supply the technology and machinery to process rice straw into construction boards, while the rice straw will be provided by members of a farmers' cooperative.

A finished house with ceilings, walls and doors using strawboard can be built in three to four days at a cost of 100,000 to 115,000 pesos (about A$6,000). A comparable "core house" in the Philippines, with no internal walls, now costs an equivalent sum to put up.

According to Mr Layfield the strawboard product is fire resistant and, with the use of steel channel sections, provides structural properties similar to lightweight concrete. Its acoustic properties make it ideal for hotels and office buildings - the material has been used in Australian airports, hotels and theatres.

Ortech has designed a Philippine house utilising the 'Easiboard' product, in line with that country's housing code, which ensures these houses can survive typhoon conditions.

Fibreboard product is a 'world first'

"This is the first significant export opportunity since it is not economical to export panels that are 50mm thick as against 10mm thick plywood," said Mr Layfield, noting that the steel channels can be economically transported. They will eventually also be built in the Philippines.

A single plant to manufacture the panels will cost about 50 million pesos (A$2.5 million).

Mr Layfield said he had received good support from Austrade and the Export Finance Insurance Corporation (EFIC) as well as from Australia's Trade Minister, Senator Bob McMullan.

The strawboard panels are made in an extrusion process that does not involve any chemical additives. The straw gives up a natural resin under heat and pressure which enables the product to be extruded as a medium density fibreboard for a housing application that is "a world first".

Under the deal with the Philippines, Ortech is assured of 12 months of sales of finished product for construction of 4,000 houses.

Mr Layfield said the Ortech building system will provide additional income for Philippine rice farmers, an estimated 20,000 pesos a year per hectare, with a single plant generating direct and indirect employment for about 500 people. These people will gather straw, haul, process and convert the strawboard into houses and other buildings such as schools and commercial projects.

Ortech managing director Derek Layfield (left) with high-ranking Filipino officials in front of a model strawboard house

Light rail is approved

Manila - Property developer Ayala Land Inc and French firms Bouygues and Systra-Sofretu-Sofrerail will start negotiations soon for the construction of a 16 billion peso (A$845 million) light rail transit system in Manila.

The Department of Transportation & Communications said the three firms signed a memorandum of understanding to start talks for a light rail venture called LRT-4.

The light rail system will run 15.2 kilometres from Espana to Novaliches in Manila.

Under the agreement, the three firms have until March 1996 to iron out the details of their venture such as capital requirements, funding, areas of responsibility, and admission of new investors.

The LRT-4 system is expected to be completed in 1998 as Ayala Land's second light rail project. Earlier, it had joined EDSA LRT Holdings Inc, led by another property firm Fil-Estate Land Inc, to build the US$700-million LRT-3 along Epifanio de los Santos Avenue, Manila's main north-south highway.

Construction of LRT-3 will start next month and is expected to be completed by May 1998.

– Reuter