construction resources & waste platform

SUMMARY

BigREc Survey 2007

A survey of the UK

reclamation and salvage trade

The BigREc survey was commissioned as part of the Construction Resources and Waste Platform (CRWP) work programme for 2006/07 . CRWP is funded by Defra. The survey was undertaken by Salvo Llp from October 2006 to January 2007, with the final report being finished in November 2007.

The objectives of the BigREc survey were as follows:

- To provide data on the amount and type of building materials being reclaimed
- To provide a comparison in terms of overall levels of reclamation in 2006, compared to the previous survey of 1998
- To draw conclusions as to the current status of the industry and to identify possible interventions that might increase the levels of reclamation in the UK.

BigREc aimed to present a snapshot of the UK architectural salvage trade and followed the format of an identical survey of the trade carried out in 1998, also by Salvo. The survey looked at reclaimed building materials from the very old antique and expensive, to the broad range of stock found in a typical UK salvage yard, through to the more modern and practically free salvage. It was carried out in two phases:

1. A postcard survey asking three straightforward questions.
2. The main survey which questioned willing respondents of the postcard survey in more detail.

Detailed BigREc Questionnaires were sent to 323 salvage businesses and 36 were completed and returned.

The conclusions arising from the questionnaire are summarised below.

In the 'salvaged' sector, there appears to be more activity than predicted, with sales identified by the postcard survey showing a 400% increase. The most likely explanation for this is that BigREc respondents have dropped out of scrap leaving the field to new small one-man businesses selling scrap UPVC windows, scrap plasterboard etc. The supply of these materials is split between private disposals and direct from demolition. The survey shows an increase in customers who are developers, which could possibly be a result of buy-to-lets mopping up cheaper secondhand materials for refurbishment. There is now stronger demand for reusable steels but the supply does not appear to be feeding through into salvaged stocks from demolition. The supply of modern timber and timber fittings from demolition has all but stopped. Although no wood is burned either on demolition sites or by demolition contractors off site, the amount of reclaimable salvage wood, as opposed to scrap unusable wood, has dropped. Most of this wood appears to be chipped for compost or turned into MDF panel board.

In the 'reclaimed' sector, anecdotal evidence from salvage dealers indicates that old but reclaimable timber beams are being chipped for MDF or compost and reclaimable secondhand bricks are being crushed by demolition contractors under time pressure. The picture emerging from the BigREc survey seems to reinforce the trade's views about bricks but undermines their views on reclaimed beams. Reclaimed brick stocks are down from 37 million to 33 million and the amount supplied from demolition sites has dropped. There were more customers for reclaimed bricks from the private sector in 2007 compared to 1997, despite an increase in standards of supply.

Reclaimed roofing stocks have dropped by two-thirds, probably as a result of difficulties in getting access to sites to remove tiles and slates ahead of demolition. Sales have also dropped by two thirds, although the percentage sold to mainstream construction has risen from 8% to 18% Standards of supply were higher in reclaimed roofing than other sectors in 1997, and have remained so. Reclaimed stone stocks are down by a half although the amount paid per tonne has risen from £35 in 1997 to £150 in 2007. Most now comes from private sources. Demolition supplied eight times more stone in 1997 than in 2007.

Reclaimed flooring stocks are down and fewer dealers are trading in flooring, possibly a result of cheaper competition from the new laminate wood-flooring sector. Customers are down and sales have dropped from £29m to £12m. In order to try to compete with new kiln-dried wood, the number of dealers able to supply kiln-dried reclaimed flooring has risen from 25% to 80%. The real or perceived additional labour costs of fitting reclaimed wood flooring and the fact that many people cannot see the difference in quality between antiqued new wood and original -

reclaimed may be to blame. Reclaimed paving stocks are down from 573,000 m2 to 141,000 m2, although prices paid for reclaimed flooring stocks have risen from an average of £16 in 1997 to £48 per square metre in 2007. The 'architectural' sector saw an increase in sales from £26m to £43m. There seems to have been a shift in appreciation of antique worked stone and wood from earlier times, with more people wanting to fit details back into period property and new properties. The fact that considerably less stocks are carried now than ten years ago means that customers are prepared to act faster when the right item comes up.

More people are using antique ornamental stone and terracotta, often in gardens or landscape settings, and such material has been getting scarcer and more expensive for years. The salvage trade is unlike others in that old stocks in all sectors of the conventional economy depreciate and must be sold on cheaply to make way for new models. The opposite tends to be true in salvage where stocks appreciate the longer they remain unsold. A southwest business that was trading primarily in ornamental stone for thirty years has seen the value of its old unrestored stock increase by a factor of ten in the past ten years. This material cannot be replaced at the cheaper prices at which it was originally bought so the business is in no hurry to sell and can hold out for high prices for finished pieces.

In 1997, most salvage operators were local resources, taking in local materials and reselling them locally. Now they operate regionally, and supplement their reclaimed stocks with 50% new materials. At the same time, far fewer materials are coming to the trade from demolition waste streams than ten years ago. The overall amount saved for reuse by the architectural salvage sector has dropped from 3.3 million tonnes to 2.6 million tonnes in the past ten years. Consequently, the amount of embodied energy being avoided has reduced significantly. The overall impact is further compounded when the supply of materials dries up, since the trade suppliers move over to new and reproduction materials, often sourced from far-away countries.

Overall, the trade in 2007 shows a large increase in value of sales but a general decrease in the volumes of materials salvaged. There appears to have been a shift in the trade since 1997 from selling entirely reclaimed building materials and architectural salvage to 2007 where sales also include a significant proportion of new and reproduction alternatives to salvaged materials, perhaps as high as 50% of sales.

This means that the demand for reclaimed, or reclaimed – effect, products has increased over the past ten years. The shift towards reproduction items suggests one or more of the following:

- Supply of genuine items is lower than demand; either because they are not entering the marketplace (i.e. being recycled or landfilled) or because demolition of appropriate buildings is taking place at a lower rate
- Genuine reclaimed products and materials are more expensive than their reproduction equivalent
- Customers have concerns over the provenance or 'fitness for purpose' of genuine reclaimed products and materials

The trend is very concerning as the positive environmental effect of reclaiming building materials cannot be attributed to reproduction items, whilst customers may be under the false impression that they are reusing materials and products. Hopefully, the requirement to have documentation relating to the source of reused materials in the Code for Sustainable Homes will help to raise awareness of genuine reclamation versus reproduction.

Of the underlying reasons listed above, the CRWP will be concentrating on the third aspect in the next stage of work; i.e. improving information relating to the use, performance and embodied energy of key reclaimed products and materials.

PROJECT PARTNERS

defra
Department for Environment Food and Rural Affairs
AEA
bre
crw
construction resources & waste platform
SAINT-GOBAIN
YOUR M&S
wates
CONSTRUCTING EXCELLENCE
in the built environment