**Z-Furring: It Can Simplify Finishing**

Contractor’s Suggestion Improves Installation and Produces Labor Savings

Insulation and finishing of masonry and concrete walls has become a common means of making the most of available space while improving heating and cooling efficiency.

Generally, this has involved application of rigid insulation panels against an adhesive base. Drywall panels are then positioned over the rigid insulation and secured with a second coat of adhesive.

Now, a new method appears to offer several advantages while completely doing away with adhesives.

Heart of the system is a rolled metal section which holds insulation panels firmly against the wall and provides a solid surface for attachment of drywall panels.

Known as “Z-furring”, the sections are secured vertically to concrete or masonry walls with conventional fastening methods. As each section is anchored, an insulation panel is installed with its leading edge positioned snugly against the Z-furring web.

The next Z-furring member is anchored with its outer flange covering the trailing edge of the insulation panel, thus holding it firmly in place.

When all insulation panels have been installed, gypsum panels are placed over the insulation and screw attached to the exposed Z-furring flanges.

**No Moisture Problem**

Because adhesives are not used, the threat of moisture weakening the bond between wall materials is eliminated. This can be quite important, particularly on below-grade walls which are highly vulnerable to moisture accumulation.

Since residual moisture is not a problem, the Z-furring system is considered ideal for lath and plaster as well as drywall applications.

The system received a significant field test recently during construction of Detroit’s Patrick V. McNamara Federal Office Building. The GSA project features poured concrete walls at all four corners throughout its 29 stories. Architectural services were performed by Detroit’s Smith Hinchman & Grylls Associates, Inc.

iaWCC subcontractor Smith-Santoro Inc., of Southfield, Mich., was given the job of finishing the walls. Insulation work has handled by the Oberson Insulation Company, Detroit.

“Finishing of the interior concrete originally called for use of the standard metal furring or channel-type section”, recalls Loren Klevering, project manager for the architect.

“The suggestion for using Z-furring came from the contractor. He felt that there were potential labor saving advantages to the material. After analyzing the contractor’s request, we agreed that the Z-furring looked like a simpler and more effective solution”.

The Z-furring sections leave no uninsulated air gaps as the hat-type metal furring sections would have. Where adhesives might otherwise be used, the Z-furring replaces both base coat and wallboard coat in one operation. Savings in both adhesive cost and adhesive setup time result. When
Rigid insulation panels are positioned snugly against the web of a Z-furring section. The next Z-furring strip is installed with its outer flange covering the leading edge of the insulation panel, thus holding it firmly in place.

With all insulation in place, lath board or drywall panels are secured to expose Z-furring flanges. Screws or standard clipping hardware work equally well.

used, adhesives are not always evenly applied. Low areas in poured concrete can be a particular problem.

The Z-furring sections, however, easily span minor low areas and provide positive, visible attachment to the wall.

“This was our first real experience with the Z-furring material”, notes Smith-Santoro job superintendent Jake Miller. “There’s no doubt about it, it has some real advantages, especially for lath and plaster finishing which this job required”.

Manufacturer of the Z-furring sections is Allied Structural Industries of Detroit, a leading producer of metal stud systems and related building products. The ASI sections feature knurled outer flanges which aid screw penetration for trouble-free attachment of drywall panels.

**Feature Not Needed**

On the Detroit project, however, the feature wasn’t needed. “We used standard clipping hardware for attaching lath board directly to the Z-furring section”, said Miller. “It worked beautifully”.

The insulation contractor concurs. “Eliminating the application of adhesive to the wall is a real work saver”, observed Oberson superintendent Duane LePla. “The Z-furring sections performed exactly as they were supposed to”.

ASI makes the galvanized sections in sizes suitable for 3/4” to 1-1/2” insulation panels. 8’6” lengths are standard.