PLAINTIFF'S EXHIBIT
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Chapter IV

Clips and Lath and Plaster Constructions

Many systems involving special clips have been developed to attach gypsum lath to framing by other means than direct nails. Some of the attachment devices are made of sheet metal, others are small wire clips and others of heavy wire and of long wire. Some clips are designed to attach the lath to wood framing, others to attach the lath to metal framing.

In addition to the essential function of attaching the lath to the framing, clips provide some resiliency in the construction since the lath is not firmly tied into the framing and hence the surface is independent of movements of the framing and also more resistant to sound transmission. Of two constructions identical in all respects except that in one the lath is clipped to the framing while in the other it is nailed or more firmly attached to the framing, the construction with the clips will give a higher decibel noise reduction coefficient than the other.

Clips for use with gypsum lath are manufactured by relatively few concerns, the major ones being:

The United States Gypsum Company -

This company manufactures most of their own clips, buy a few specialty items outside and have a very complete line of clips for use with gypsum lath. These products are sold under the same merchandising policies governing the sale of gypsum products.

The National Gypsum Company -

This company manufactures a few clips and fills out a competitive line with that of U.S.G. by handling clips made for them by the Neslo Manufacturing Company (Olsen Clips) and others. This company also sells clips under the same merchandising policies governing the sale of their gypsum products.

The Kaiser Gypsum Company -

This company sells one clip made for them by a west coast producer known as the "Speedy" clip. This is made of sheet metal and is somewhat versatile in its use but in no way makes the company competitive with such organizations as the preceding two.

The Burson Company of Chicago -

This is a small specialty company which is an offshoot of the Burson Plastering Company in Chicago. They manufacture a few and have a few others made for them to their specifications by a steel wire fabricator. They are not competitive as their line is very limited. These clips are sold through distributors and are available to the plaster contractor direct.

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The Neslo Manufacturing Co. of New York -

This company manufactures the line of Olsen clips (notice that Neslo is Olsen spelled backwards). They manufacture a very complete line of clips and have made for them by a few specialty houses, five or six other clips. Neslo offers a line that is equal to that of U.S.G. and National's plus a few additional clips. The only clip they do not manufacture which is one equal to U.S.G. "Brace-Tite" or National "Wall-Tite" clip. The Olsen "F" and "Z" clips provide this same function. Neslo distribute their clips through distributors and dealers, but will ship directly to plastering contractors. They maintain a price markup, however, such that on their sales directly to a plastering contractor the price is in line with that which a plastering contractor would pay to a dealer for the clip.

The Bestwall Gypsum Company -

Bestwall does not manufacture any clips, but offers through its sales force the full line of Olsen clips available from the Neslo Manufacturing Company. The merchandising plan calls for the sale of these items to dealers who in turn sell to plastering contractors. Shipments may be made directly to the contractor.

On the several pages following are comparisons on several constructions showing the clips from different manufacturers that would be necessary for each particular construction. A careful study of this will show what clips available through Bestwall may be substituted for those offered by one of the other manufacturers. However, care should be used in substituting directly one clip for another since one company sometimes may use two clips where another company uses one or some companies may have an all-purpose clip that is used in lieu of several clips by other companies.

In studying these construction details notice the various clips can be grouped according to several basic uses.

"Field Clips"

These are used at the edge of lath to attach the lath to the framing anywhere in the general field of the wall or ceiling.

"Bridge Clip"

These clips are used to connect one lath to another lath holding them in the same plane, but not necessarily to attach the lath to the framing.

"Starter Clips"

Several of these constructions must be started at the floor and worked up, in which case the starter clip is one clip used at the base. It may perform

("Starter Clips" Continued)

only one function of holding the lath to the frame, but some are also used to hold the vertical framing member against the bottom runner and in place as well as provide for attaching the lath at that point.

'Finishing Clips"

These clips are necessary at the edge of the lath as the final sheet is put in place either against the ceiling surface or against the side wall or against the floor if the system were erected starting from the top and working down. In some instances the same type clip may be used to start and finish, but frequently the finishing clip has to be a little different since all lath are in place, and it is a problem to make the final connection without some special type clip.

Corner Clips"

At the intersection of two walls a corner clip holds the lath in both planes.

s mentioned above, U.S.G. promotes use of a "Brace-tite" clip and National a Wall-tite" clip which are a means of attaching lath to a metal furring strip and lso provide support across the face of that lath and tieing in to the next clip. most important function of this clip is to provide support in the center of the ath. In the Olsen line there is a center board clip known as a "Z" clip which s inserted through the lath and attaches the field of the lath to the framing. here is a clip available from the L. A. Young Spring and Wire Corporation, 2 Russell Street, Detroit, Michigan, which is similar to the "Brace-tite" and Wall-tite" clips (see Form #5566 - Bestwall Lath and Plaster for Fireproof Floor Ceiling Construction).

Temporary Bracing Clips"

These are used mainly in 2" solid plaster paritions to hold the furring strips in place which are used for bracing during plastering.

ıe careful study of pages 4.285, 6, and 7 will be most helpful in securing this ype of business. Clips are essential for gypsum lath and plaster used in membrane ireproofing and over metal framing.

A Comparison of Bestwall Olsen Clips With Other Manufacturers Clips

as used with various wall and ceiling constructions

TYPE OF CONSTRUCTION	MANUFACTURE	FIELD CLIP	BRIDGE CLIP	STARTER CLIP	FINISHING CLIP	CORNER CLIP	CENTERBOARD CLIP	TEMPORARY BRACING
Hollow Wall	OLSEN	F-1, JX or J	C	AS or S	JF	H or B-1	CB	
Sheet Metal Studs	Nat. Gypsum	HS-1	C or EJ	HS-2	HS-3	FC-3	-	
	U. S. G.	-	B-1	TL-2	-	R-2	-	
	Kaiser	Speedie						
	Nat. Plaster Blk.	102-F	103A	Stud Starter				
	Burson	C	W	-	-	WF-1	U	
Hollow Wall	U.S.G.	TL-1	B-1	TL-2	-	R-2	-	
Truss-Steel Studs	OLSEN	F-1/2	C	AS or S	JF	H or B-1	-	
Suspended Ceilings	OLSEN	F-1 or J	C	FS-1	Z-1		Z-1	
	Nat. Gypsum	Fl or WT-1	C or EJ	WT-2	-	-	-	
	U.S.G.	BT-1	B-1	BT-1 Starter				
	Burson	C-	W	-	-	-	U	
	Nat. Plaster Blk.	1-1	103A	-	-	-	-	

A Comparison of Bestwall Olsen Clips With Other Manufacturers Clips

As used with various wall and ceiling constructions

TYPE OF CONSTRUCTION	MANUFACTURER	FIELD CLIP	BRIDGE CLIP	STARTER CLIP	FINISHING CLIP	CORNER CLIP	CENTERBOARD CLIP	TEMPORARY BRACING
Resilient Wall Construction	OLSEN	RX	C	K	K	B-1	-	
	Nat. Gypsum	FC-1	EJ	FC-2	FC-2	FC-3	-	
	U.S.G.	R-1	B-1	R-2	0	R-2	-	
Resilient Ceilings	OLSEN	C	C	K	K	B-1		
	Nat. Gypsum	FC-1	EJ	FC-2	FC-2	FC-2	-	
	U.S.G.	R-1	B-1	R-2	-	R-2	-	
Masonry Furring	OLSEN	RX	C	K	K	B-1	-	
	U.S.G.	R-5	B-1	R-2	-	R-2	-	
2" Solid Gypsum Lath Partitions	OLSEN	C	C	-	JF	H or B-1	Z-1	G
	Nat. Gypsum	C	C	-	JF	H or B-1	Z-1	G
	U.S.G.	B-1	B-1	-	Hairpin	R-2	-	Bracing Clip

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A Comparison of Bestwall Olsen Clips With Other Manufacturers Clips

As used with various wall and ceiling constructions

TYPE OF CONSTRUCTION	MANUFACTURER	FIELD CLIP	BRIDGE CLIP	STARTER CLIP	FINISHING CLIP	CORNER CLIP	CENTERBOARD CLIP	TEMPORARY BRACING
Furred Walls	OLSEN	F-1, JX or J	C	AS or S	JF	B-1	Z-1	
	Nat. Gypsum	(Ditto Above)						
	U.S.G.	R-3	B-1	-	-	R-2	-	
			SPECIAL CLIPS					
Wire Hangers 3/4" Channel to Beams or Bar Joists	OLSEN	(Specify thickness of flange of beam)				Type "IB"		
	Nat. Plast. Block					No. 502		
Wire Hangers 3/4" Channel to 1-1/2"	OLSEN	Steel-Tie						
	"	606						
	"	2-1/4" Hairpin						
	Nat. Plaster	505						
	Nat. Gypsum	2-1/4" Hairpin						
Double Hung Ceilings	OLSEN	Economical insert for hanging secondary ceilings of main carrying Channels				Jimmy Clip		
	Burson					X Clip		

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