

# **NO** **MORE** **PROPS**



A revolutionary development  
in building equipment

Patented in the UK  
PATENT NO. GB2472667B

International Patent Pending  
PCT/IB2010/053560

## NO MORE PROPS - Product Overview



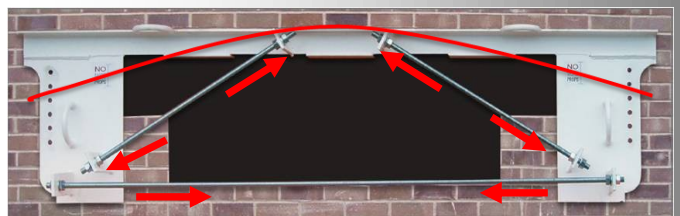
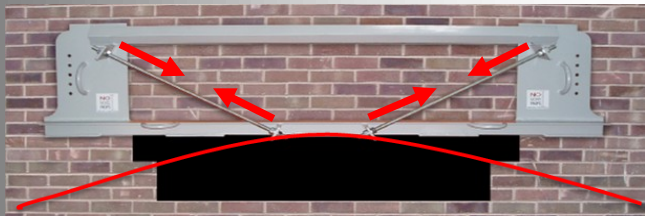
No More Props is a temporary lintel. It is a quicker, easier and safer alternative to using acrows and needles or strongboys. It's a single tool that replaces the need for multiple acrows, saving site preparation time and cutting job time in half, particularly on upper floor work.

It's ideal for installing new lintels, or replacing lintels that are cracked and unsafe. If you're knocking through a wall to form a new door, window or opening into a new extension or conservatory, then you can do the job more safely and in about half the time that it would take using acrows and strongboys. And, if you're doing a job on an upper floor, then No More Props is an incredible time saver, as unlike acrows, you don't need to point load, prop to ground or apply for a Temporary Works Certificate to ensure the ground's suitability for propping.



Sometimes there is a need to insert a permanent lintel close to a ceiling or soffit and there's not enough clearance to install No More Props. In this case, No More Props Tight Space is used.

No More Props has been designed to perform in the same way as a permanent lintel, supporting the wall above, without the need for any contact with the ground. It slots into the wall and, when the tension bars are tightened, deflects the pressure of the wall above.



No More Props exceeds by a large factor the typical load a lintel has to bear, meaning it is well engineered for its task, and provides a high degree of safety. It exceeds by **13 times** the BS Standard's requirement for the load bearing of a permanent lintel. (See the 'Sizes and Specs' page for full load bearing details of all sizes).

No More Props can be used on flat faced stone, block work and brickwork.



Depending on the job, it can be used on its own, or in combination with No More Props Tight Space. Both the temporary lintels allow the quick and easy replacement, or installation of, permanent concrete, steel or Catnic lintels in single skin, double skin or cavity walls.



## **NO MORE PROPS** - Vs. Acrow Props

When building an extension, or making a new door or window opening, there is the need to knock through into the existing building and install a lintel. This means the builder or the DIYer has to knock a few bricks out to create a hole, which then allows the wall above to be supported using adjustable acrow props - this is a skilled, difficult and lengthy process, but has to be done properly to prevent the wall collapsing.

Up until now, there has been no alternative to using acrows, but these have numerous disadvantages, which No More Props does not.

Firstly, you need quite a few acrow props, along with a needle or strongboy for each, to support the wall from either side. You can end up with a forest of acrows, which stop you putting a steel or concrete lintel in.

If you're working on an upper floor, then you need even more acrows, in order to prop to ground.

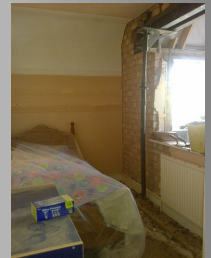
Acrow props are particularly difficult to work around when carrying out work on small openings, such as windows, or in cramped spaces.

And when you've done the job, you have to patch up the holes you made to install the acrows and strongboys in the first place.

Acrow props are bulky to store, transport and work with. They rust and are uncomfortable to handle - trapping fingers between the moving parts is an occupational hazard.....any builder will tell you !

They can present Health & Safety at Work issues with the risk of timber wedges being accidentally knocked out from between the acrow and the stone or brickwork.

So, to summarise the advantages of No More Props over acrow props.....



### **UNLIKE TRADITIONAL BUILDING PROPS, THERE IS.....**

- NO PROPPING TO GROUND OR ONTO UNEVEN SURFACES**  
much quicker & easier, especially on upper floors
- NO WORKING AROUND OBSTRUCTIONS**  
because the wall is propped from above, not by the ground
- NO PATCHING UP AFTER THE JOB**  
because the wall is supported right across the opening
- NO POTENTIAL SAFETY HAZARD**  
a fully supported opening makes for a safer working environment
- NO FIDDLING WITH MOVING PARTS**  
as it is a single tool and not multiple pieces of equipment
- NO TRAPPING YOUR FINGERS**  
as tensioning done using a spanner
- NO SPENDING A LOT OF TIME PREPPING THE SITE**  
because of no propping to ground and no multiple props



## NO MORE PROPS - Usage Guide

No More Props is fitted in just 4 simple steps. Before you use No More Props, ensure all personal protective equipment (PPE) is worn at all times.

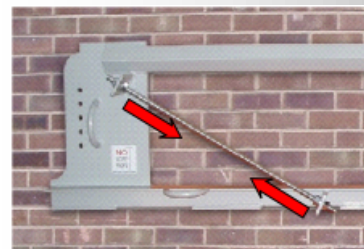
**STEP 1** - A slot cut, 2"/ 5cm deep is made, using a grinder or Stihl saw, into the mortar bed of the existing brickwork, directly above where you want to fit a permanent lintel. A special measuring tool is supplied to allow quick and easy checking that there are no obstructions in the mortar bed, and the depth of the cut is sufficient.



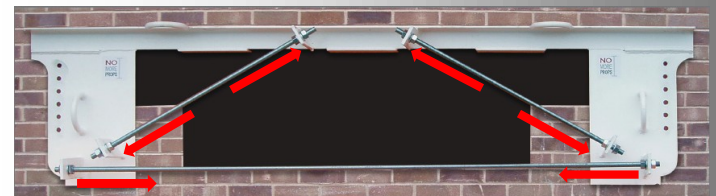
**STEP 2** - No More Props is slotted into place with its 'L' shaped lintel pushed into the cut out mortar bed.



**STEP 3** - The 'Tension Bars' are tightened with a spanner, in the direction shown by the arrows, to prevent any brick movement above.



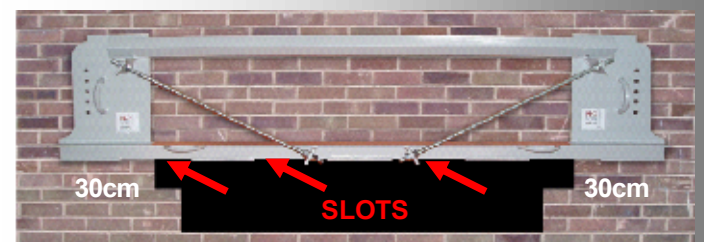
The Tight Space unit is tensioned differently to No More Props, as it operates in reverse to deflect the load above.



For added security, there are holes in the side panels for bolting the tool to the wall. A choice of holes ensures alignment with a mortar bed. A 110 volt drill and 8mm self tapping bolts are required for this purpose.

**STEP 4** - An opening can then be cut/knocked out, so a permanent lintel can be fitted in place. Once the permanent lintel is in position, No More Props can be removed.

The slots at the base of No More Props leave room for slate packing to be inserted between the permanent stone or concrete lintel now in position, and the wall above, after which No More Props can easily be removed.



Alternatively, the slots can be dry packed, but 24 hours must be allowed before removing No More Props.





## **NO MORE PROPS** - In Use

No More Props Tight Space being used by a professional builder to create a large window opening on the first floor of an old, stone coach house.



Intended site of opening



Mortar cut made and tested



No More Props in place



Tension bars tightened



Outer skin wall opening made



Lintel and jambs fitted



Slate packing inserted



No More Props removed



Mortar course pointed up

### **Builder Feedback on No More Props**

*"We can't understand why it 's taken until now to develop something that does the same job as props but without the hassle." Andy Hartley - Revival Developments*

*"No More Props is going to make me money !" David France Stonemasonry Ltd*

*"Simply brilliant idea ! I've handed out No More Props leaflets to everyone I know."*  
*Frank Pilkington - Pilkington Dean Brickwork Ltd*

*"This is a great idea, and I've already mentioned it to my local hire centre rep. - they should be stocking No More Props." Gareth Pearson - Self Employed Builder*

*" No More Props has a number of clear pluses :-*  
*- no difficult, moving parts to handle like traditional props*  
*- nothing getting in the way where you're working*  
*- no need to make good brickwork above an opening"*  
*Neil Jowett - Neil Jowett (Builders) Limited*

*"No More Props is the best thing since sliced bread - it will make my job much quicker and easier."*  
*Andy Clemson - Self Employed Builder*

*"I think the biggest benefit will be how much time it 'll save and how much easier it will be to handle than traditional props".*  
*Martin Mellor - Revival Developments*

## NO MORE PROPS - Sizes & Specs

### Sizes

Both No More Props and No More Props Tight Space come in 3 sizes. Their widths and weights are shown below.

Size of Unit	Small	Medium	Large
Width (mm)	1900	2400	2700
Weight No More Props	35.8kg	42.8kg	46.9kg
Weight Tight Space	31.3kg	36.8kg	40.1kg

### No More Props vs. Acrow Props

No More Props is a single tool that replaces multiple pieces of equipment and so cuts job time in half and saves money.

You only need 1 No More Props or Tight Space unit vs. a number of acrows and strongboys, depending on the size of opening to be made.

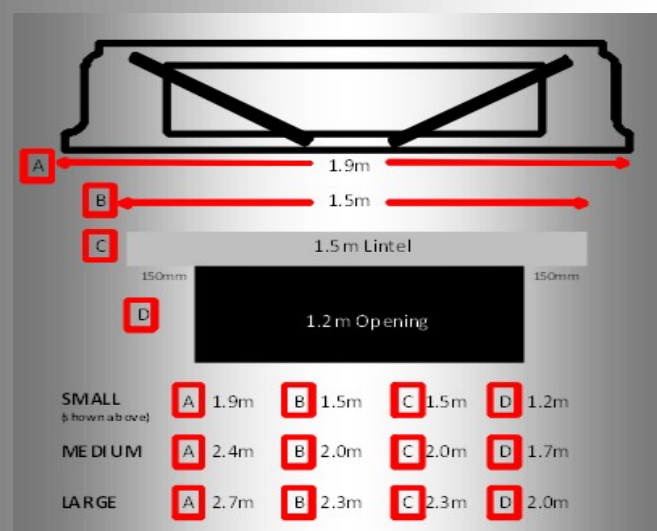
If you're working on upper floors, then the number of acrows required is even greater.....but you still only need 1 No More Props or Tight Space unit, because there is no need to prop to ground or point load.

### Opening Sizes

The diagrams below show the size of unit needed to make an opening.

### NO MORE PROPS

When using the No More Props unit, there is a little more flexibility on the size of the opening you can go up to, as the "side panels" of the product face upwards.



### Clearance to Allow Fitting of Units

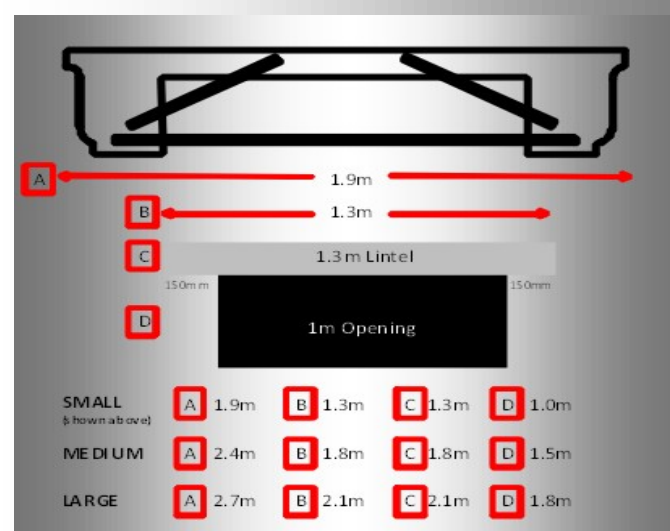
No More Props requires 47cm/19" of clearance above to allow it to be fitted. Tight Space has been designed specifically for jobs where there is not this space above, (for example, where there is an obstruction, such as a ceiling or soffit), and only requires 10cm/4" clearance.



Size of Unit	Small	Medium	Large
Equivalent no. of acrow props at ground level	2	4	6
Equivalent no. of strongboys at ground level	2	4	6
Time saving in propping/prepping site	50%	50%	50%

### NO MORE PROPS TIGHT SPACE

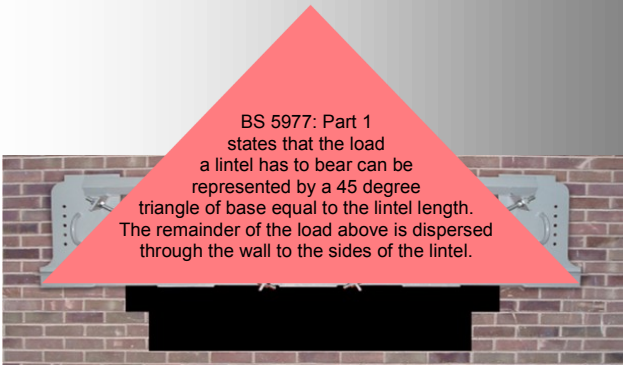
When using the No More Props Tight Space unit, the "side panels" of the product face downwards, so you must work within the distance between the panels.





# NO MORE PROPS - Load Bearing Capability

An assessment of the loading carried by a lintel can be made by a triangle method, as given in BS 5977 : Part 1 (European and British Standard specification for lintels). The 45 degree triangle, of base equal to the span of the lintel, represents the load the lintel must bear.



BS5977 : Part 1 calculates that a lintel should resist a load of **1.46kN** (kiloNewtons) at a 1.8 metre span of exterior brickwork with a serviceability load of span/200. The largest, 2.7 metre wide No More Props resisted a load of **20kN** in test, giving a factor of safety in excess of **13 times** the BS Standard's requirement. See below for full load bearing details of all sizes.

## No More Props Technical Test Results



No More Props was tested by Ceram Building Technology of Stoke-on-Trent. The temporary lintel underwent a Uniformly Distributed Load (UDL) Test and an Ultimate Load Test. The first tests the unit to failure with no support of a wall structure, and the second tests the load sustained within a brick wall.

Both tests showed the factor of safety to be far in excess of the BS Standard for lintels. The results of the Uniformly Distributed Load Test are shown in the table opposite for the 3 sizes of unit. The results of the Ultimate Load Test are shown in the table beneath. The load bearing within a wall is far greater, due to the load being partially distributed throughout the wall structure. At 73.43 kN, the wall failed, but there was minimal deflection of the No More Props temporary lintel.

## Uniformly Distributed Load Test

Unit Size	Span	Max. Load at Span/200	Load Req. by BS 5977 (assumes brick and outer leaf)	Max. Load at Span/200	Load Req. by BS 5977 (assumes brick and outer leaf)
mm	mm	kN*	kN*	kg	kN*
1900	1000	31.1	0.45	3141	45
2400	1500	24.2	1.02	2445	103
2700	1800	20.1	1.46	2028	147

\* 10 kN is equal to 1 metric ton.

## Ultimate Load Test

Failure Load	Failure Load	Central Deflection of Lintel at Failure Span/200	Mode of Failure
kN*	kg	mm	
73.43	7424	1.1	Diagonal cracking of the wall at the under-side of the bearers and above the centre span of the lintel.

\* 10 kN is equal to 1 metric ton.



# **NO MORE PROPS**

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by

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