

Rating



Review by:

Alan Darbyshire of Darbyshire Associates

Profession:

CAD Trainer

System Requirements:  
(As stated)

500MHZ Processor, 150MB Free disk space for Installation,  
128MB RAM  
Microsoft® Windows 2000/XP/Vista.  
1024x768 VGA Graphics  
SVGA Monitor, Mouse with scroll wheel and printer  
Internet Connection

## Background Information

[HBXL] have a good range of software packages specifically designed for the builder/ developer. PLANSXPRESS® gives builders the tools to produce building plans and elevations for submission to planners and clients alike, plus more importantly link this drafting process to their costing software - ESTIMATORXPRESS®.

I have had my own business now for over six years, training on various CAD software (including AutoCAD, SketchUp and various other CAD programs) plus carrying out 2D and 3D contract drafting / scanning work for my own clients. Prior to that I worked for a CAD Dealership for around 12 years servicing the mechanical and architectural marketplaces.

## Getting Started

Inside the manual are comprehensive tutorials that take you through the creation of a reasonable sized detached property -no index is provided. There is also a mouse mat with toolbar/ f-key information printed on, and a bookmark with all support contact details including the name of your own 'personal advisor'.

On the reverse there is information regarding internet training, which can be booked and has to be paid for. However telephone technical support has to be paid for, either up-front with their 1 year Support & Updates option @ £149 and covers you for all brand new editions/upgrades that are released in the year of your subscription as well as interim mini updates or you can choose the £19.99 per incident/call. HBXL have a software solution that can be deployed onto your system to allow them to take control and 'show you how', which can be a great benefit if you are struggling and can understand exactly what to do via the telephone alone. I have seen this in operation before and was impressed. An Internet connection is therefore a must. [HBXL Support & Updates is compulsory in the first year, the £19.99 per call charge can apply from the second year]

There were an additional six cards of pages out of the getting started manual, that help you to see the building at various scales/ views with plenty of information and dimensions...thus saving you having to keep turning back to a specific page for a dimension or information - a thoughtful inclusion.

## Install and Setup

Installation is straightforward and a 7-day temporary alpha/numeric unlock key was provided on the CD case to enable the software, or you can opt for the 14 day evaluation if required. The registration has to be done

over the Internet and once some address information is entered, a user I.D. Is issued to enable you to download updates. You will receive your full licence unlock via e-mail.

At this stage I must point out that there are currently two flavours of PLANSXPRESS™ (as at 01.09.08):-

PLANSXPRESS® **total toolkit edition** (£499) and PLANSXPRESS® **standard edition** (£399). Please note that all prices shown are without the vat.

The main difference being that PLANSXPRESS® **toolkit** integrates with ESTIMATORXPRESS® to fully price up your building work directly from your plans!

## ***A tour of the software***

Taking a quick look through PLANSXPRESS® you can see that it is totally geared up towards the drafting/ design of buildings as there are toolbars for walls/ doors/ windows/ staircases and more including a comprehensive range of standard architectural details/ symbols. Many of these are grouped into the 'estimating' section, there is however also a range of 'non-estimated' symbols such as trees/ people/ vehicles etc.

The system also works by using a wizard to define sheet (A1/ A2/ A3 etc), scale (1:50/ 1:100 etc) and units (mm/ m/ ft etc), plus if you use a template, offers you a choice of including a sheet border (which may be easily edited to add your own text/ logo) added to the working area, which you draft into. This can be comforting to the designer who is migrating from the drawing board. I choose the 1:50 template with notes/ title block as my starting point as per the tutorial. This sheet/ scale units information is conveyed to you in to status bar lower lhs of the screen.

As with any CAD software, there are quite a few toolbars and methods to contend with.

This system has construction lines built-in and sends these to its own construction layer automatically. Thus using these we are able to lay out the basic plan of the building.

## ***Working through the tutorial***

If you are using this software for the first time (as with any cad software) you need to follow the tutorial very carefully and read the instructions on the 'instruction bar' you should also look closely at the feedback from your cursor and any snaps or dimensions that come up. PLANSXPRESS® makes use of 'hotkeys' and 'F-keys' plus cursor arrows to 'drive' the geometry in the required direction. The 6 cards certainly come into play here as most of the dimensions are shown clearly on card 'Diagram B'.

## ***External walls***

Once the construction lines are placed we can use the 'external wall' tool to draw these by snapping at line intersections. Here you can see straight away that this is not just a CAD software package that draws lines. The system offers you a range of wall types from 'brick & block cavity' to stone to sleeper and more. I chose the 'ground floor cavity wall for 2.325m high floor to joist (multi storey)' - you can't get a better description than that for letting you know what you are about to create!

The dialog you are presented with shows a very realistic looking wall in section and elevation with user adjustable dimensions for inner/ outer and cavity. These dimensions are always presented in meters and sensible default values have been pre-inserted, such as - 2.55 wall height (above DPC), .102.5 brick, .100 block and .075 coursing block (these may/ may not be required depending on wall height set). Tech Tips and Tech Labels are available to assist you if/as required, plus F1 launches the help system, where you can get most of the information you need if you are stuck.

Next you are presented with the 'foundation details' for the wall you choose...again default values are present plus plank and strut/ extracted material bulking is all taken into consideration. Onwards to the

'footing details' and again values including cavity width below ground is accounted for as well as wall insulation and DPC.

Surprisingly (for me) we are then taken to a 'plastering and decoration' dialog, which is the final one in 'the external wall' tool where question such as plastering/ skirting are answered as well as a further option regarding gable walls (if required) This just goes to show how much detail can be taken across to ESTIMATORXPRESS®.

Once we hit 'finish' we are prompted to give the start point of the wall and draw using the constructions as a guide, the majority of snaps are presented to you automatically (int' for intersection/ perp' for perpendicular etc) and while drawing the wall, it shows the 4 wall lines as you move your mouse. The system also tells you where the 'outside' wall line is.

Selecting the 'external side' button above the top toolbar can change this, however the tutorial shows you producing this incorrectly at first (which threw me a little) then shows you how to flip to the correct side as part of the instruction.

Whilst drawing the walls, being a CAD literate person, or I like to think I am!, I noticed the slight anomaly above so called the HBXL support desk. I received a swift answer, plus had a follow-up call from them with reference to a question regarding delivery of an item dealt with promptly (2 minutes), which can only impress.

The wall is created as one and is hatched correctly as it is drawn. Wall tidy tools (once selected – use middle mouse) are provided to clean up junctions, and walls can be flipped if draft 'inside-out' by mistake.

If you zoom into the wall for a closer look, you will see that the wall lines are shown thicker than the hatching...this is because PLANSXPRESS™ has 'show line thickness' set in the 'pens dialog' by default. I personally would tend to work with this set to off.

Construction lines can be deleted if/as required with a single button...the system prompts you to ensure it is the required action.

## **Internal walls**

Internal walls are added in a similar fashion to the external walls I used 'ground floor block wall for 2.325 floor to joist height (single storey)' walls being placed using the 'r' (relative) option and cursor keys as per our external walls. This is all comparatively easy to do and again walls are hatched for you automatically. The reference cards, proved handy while working through the tutorial.

## **Adding windows**

Lets add some windows...there are a multitude of pre-defined windows provided, plus some universal 'custom' sized options. I chose the PVCU 1200 deep at 312c 1800x1200. A location name 'Bed1/ Lounge' etc can be assigned along with header height plus a spoil-bulking factor in case this is an existing wall where rubble has to be removed from site. Fixing details can also be specified along with DPC and cill board projections. The next dialog 'reveal & jamb details' show the window in plan, with various user adjustable fixing dimensions. The next shows 'plastering & cill details' details, the final 'decoration specification' if/ as required.

Once all the relevant questions are answered you can then place the window in plan and depending whether you are 'driving' the window from the lh or rh of the building or placing into the centre of a wall you can change the insertion justification to suit.

As you move your mouse along the wall dimensions start to appear to allow easy and accurate placing. An input box for your dimension (in this instance 1115 away from the top lh external corner of the building) – the 'driving dimension is shown thus [1115] inside [] brackets.

All you do now is bring your mouse back to the wall and indicate on the external wall line – sometimes you may need to press tab to toggle the measurement in for positioning, then click with the mouse. The window is then inserted as per the one specified and a block return added to the opening.

The rest of the windows were added in a similar manner. Just for reference, I am told that the soon to be released version of PLANSXPRESS® will have the option for adding a thermal break to your openings.

## **Inserting doors**

The insertion of your doors again follows a similar methodology and once again a very good selection of doors and door types/ sizes are provided within the software. The door swing is an extra step that is indicated dynamically until you click the quadrant required with your mouse.

Structural openings can also be created via a 'structural openings tool' Calcs will however have to be prepared by your structural engineer.

One great feature of PLANSXPRESS® is that if you wish to remove a door or window...by selecting and pressing 'delete' key on keyboard, the walls heal themselves automatically, thus saving on the time consuming tidy operations required with many other software packages.

Everything works well, but it is important as with all CAD software to follow the tutorial carefully and so you gain an understanding of what is going on. It can easily be the case that you draft using the step-by-step tutorial and sometimes don't really understand how you have achieved the desired result.

## **Adding a staircase**

To complete my review I decided to add a staircase, then browse through the rest of the software and précis the rest, this being a brief overview rather than a full in-depth look at PLANSXPRESS®.

The stair tool follows the others, with a generous selection of half, quarter and straight staircases. A '15 riser quarter turn flight staircase, main flight against wall first flight free standing' was chosen.

Again the stair dialog is clear and 'stair details' allows users to designate all of the critical dimensions required even down to hours for the first fix! The 'hand rail details', 'newel post & spindle details' and 'plastering specification' plus 'decorating specification' similarly allows plenty of adjustment and information to be entered ready for costing (if/as required). The stair is placed onto a construction line created to follow an existing wall line and rotated accordingly.

## **Layers**

Another important feature of PLANSXPRESS® is that you don't have to create any layers yourself – all the layers are available and the relevant geometry: windows: doors: stairs etc are placed onto the correct layer for you automatically.

PLANSXPRESS® also has tools to allow you to:-

- Lay out suspended floors
- Set out the concrete house slab
- Automatically create the first and subsequent floors from the ground floor
- Add all your bathroom, kitchen and cloakroom symbols.
- Roofing for gable, hipped and lean-to roofs including purlins, binders plus rainwater pipes and guttering.
- Addition of drain runs and manholes/ excavation.
- Add text/ drawing labels plus details to your plans and elevations.
- Create standard whole and modular building sections.
- Electrical
- Headers and cills
- Create building sections

- Feature stone and brickwork
- External works and landscaping
- Add automatic notes to your drawing
- And more!

### ***Automatic elevations***

With PLANSXPRESS® you can even create the 2D elevations automatically from the 2D plans, thus saving a great deal of time compared with having to draft this all yourself. Elevations are built up floor-by-floor, the program interrogating the plans to find out the type and style of each door/ window and it's position in the wall.

### ***Non estimating symbols***

Additional 'non-estimating' symbols (and they are considerable!) for furniture, cars, people, vehicles, trees, kitchen, electrical, heating etc, etc, can be added along with brick / tile hatching patterns to further enhance the drawing for client presentation. These symbol libraries alone would cost quite a few pounds each.

### ***Automatic dimensions***

The automatic wall dimension tool is also easy and very fast, with a whole wall being fully dimensioned in seconds. This is via a - select wall...middle mouse...dimension...place dimension - done operation. Very slick.

### ***Printing and plotting***

Printing is as per 'other' CAD software, there is however no 'paper space' environment, thus all printing is from the initial template setting i.e.: A1 @ 1:50. You can however take any part of the drawing and open a new sheet...say A4 @ 1:100 and copy that part/ detail onto the new sheet and print that out separately...say for a drainage layout. Printouts can be to scale, or scaled to fit your sheet. Colours 'on-screen' are mapped to pen thickness as is standard with most CAD software, all are pre-assigned with 'sensible' values, so the default set-up should suit most users. However, these can be edited to suit the individual if/ as required. Plots can of course be printed in monochrome or colour.

### ***Extra VFM***

There are two other features of PLANSXPRESS® that I have not mentioned yet.

The first is the ability to view your 2d drawings in 3d using the CORTONA VRML 3D viewer. This can be downloaded free of charge from the Parallel Graphics website.

The software allows you to set up the relative levels of your building and add viewers at various locations that you can switch between. Once these are set you can export the file as a .wrl (VRML) format file, applying textures to walls, doors, windows as required. If Cortona is loaded on your pc you can double click the .wrl file to launch and obtain a simple 3D visual for your client. Please note that this 3D view is simplistic and has no shadow settings, it does however give you 3D from your 2D, so is an additional bonus. The Cortona VRML interface does however take a bit of mastering and steering your way through doors, which open as you approach needs practice before presenting to your customers. The team at HBXL inform me that the 3D is going to be updated/integrated in the new edition, and this is to be released out at the end of the month (Sept 08).

It is worth noting here that you can import and export AutoCAD .dwg and .dxf, plus export to .pdf, .wmf, .bmp, .jpg and 3D .dxf. I tested an export of my training drawing into AutoCAD LT 2007 and everything came across ok.

The final excellent feature of PLANSXPRESS®, which will appeal to all builders and developers alike, is the interface from your drawing into ESTIMATORXPRESS®. This must be worth its weight in gold for the time saved in costing a job from a drawing...typically many man-hours of work.

As I did not have a copy of ESTIMATORXPRESS®, I was unable to test this feature. Note: you can also pull information from ESTIMATORXPRESS™ back into PLANSXPRESS™ for inclusion on your drawing.

## **Conclusion**

So what's the outcome of this trial?...did PLANSXPRESS® really do "what it says on the tin".

Well the answer is a positive yes!...this is definitely a software package that is totally geared up for the builder/ developer and with some training or on-line support (which I would strongly advise) gives you a very cost-effective drafting solution, with the added bonus of export to create not only your costing, for your estimate, but a complete Bill of Materials for the whole job, which is quite staggering when you think of everything that needs to be taken into consideration.

You are however limited to using the doors/ windows/ stairs etc from the software if you want them to be transferred into ESTIMATORXPRESS®, which is logical and certainly not a failing of the system, as I am positive you can edit ESTIMATORXPRESS® to take account of any user-created symbols.

As for a mark out of 5 for PLANSXPRESS® for use by the average house builder/ self builder's, then it would be 4.5 - it gets this because it is totally focussed and does the job it was intended for. It is however not the market leader, but does it need to be? If the support is good and you get swift answers, plus get some decent training/ on-line tuition and start with a simple job, working up to larger projects how can you fail at this price and this specification.