001 BORDER – SLAB - WALLS

00:00

Hello and welcome. In this module we'll be having a look at this 3-bedroom low set sheet metal roof house. It is a 22.5-degree roof with a 600 overhang.

What I like to do is actually go through my drawings and just identify any areas that may need a closer look at and from what I can see on this drawing the only thing there will be is marrying this gable overhang over the top of this hip roof. Let's get stuck into it.

First of all, I would open up a new FrameCAD drawing, and we need to save as. and then we will do a BSET. In the BSET we will get all the information from our drawing here. We've got the builder through there with the type of house it is and the address. We will put all this into our information on our BSET.

01:17

- Company name that you're doing the job for
- Your name
- Job number - we will number this 0001
- Project name is the builder - Allam
- The project location will be the address – Lot 96 Manning Way
- The project is called Sycamore-7SG.

We'll start off with 6 borders. Sheet options will start off with a A4. You need to get your border name from the Frame Supplier that you're working for. There are a number out there. Whoever you're working for, you will have a BR space company name that you are working for.

My border scale will be 1-100. We do it in metric scale here in Australia, my text height is 180 metric. And my wind speed is the next thing that's important will be N3.

"Ensure to check the correct wind speed".

03:08

From here we'll click OK, and this will throw in all our borders. There's our information there that we've just put in. That's our drawing name.

The first thing I like to do is to put in the overall slab size, which is this measurement down here coming from this end of the house to this end and also this measurement here. I like to put that inside the border as a polyline. I type in P, 9620 and we're coming across 16960, 9620 and I close that off.

Next thing I'll do is centre this rectangle. And then I like to offset these lines one meter back or however far back you like, for my dimension lines. That will keep all my dimensions in a nicely set out formation.

04:37

I change these lines to a non-printable line which is def points and I also like to change the colour on it. But that's my preference. Next thing I will do from here is I will go through and start setting up my slab. Just coming all the way around through here, obviously coming back in through here because that's the Alfresco. Back through here and around the porch.

And I like to do this in my slab layer and as a line, not a polyline. I'll start from this point, come across, 15280, then down 10. Across, and I've got two different measurements here and I like to work it to measurements not to where I've got my line. I've got 1680. And then I come down 4180.

06:08

Now I'm coming across 13.660. Back up through the Alfresco at 6040. Cross back this way, 3330 and then back up 3580. Now I'd like to actually put in the dimensions because this way here it will show me if there's any discrepancies in the rectangle that I've produced here to the slab measurements that I've thrown in here. And that looks all pretty good.

We have to ensure that we get our slab absolutely spot on. Put the measurements in when you've done the slab and double check everything around through here. This porch measurement here as you can see is short from here, we've got a porch measurement of 1380 with this measurement coming through here.

08:07

1665 plus 150 plus 35. I can offset this measurement here. 1665. This line here and then I need to move it 185mm as well because of the 150mm and the 35mm. 185mm. That's where my slab ends there. And the other measurement was 1380 for our slab. Now I can just fillet that around there. And that's my porch measurements and our alfresco actually squares off in through here. I'll just fillet those two lines there.

09:09

The other thing we need to identify is if there are any set downs in the slab. if I go down through to the slab measurements. I've identified that there is a 40mm set down and there is a 90mm hob coming around through there. For that slab there, I will create that 90mm hob and also note that there's a 40mm set down here and a 40mm step down there and a 70mm step down here.

For the hob in the garage, 90mm. That is setback 90, 6490 offset. 6490. That is from the inside here and that is me looking at the drawings, the PDF drawings, identifying all these measurements here.

11:05

Following it through, we want 3590, offset 3590, coming down through this way. That will get fillet through there. That will fillet through there. That will fillet it through there. So, theirs our 90mm hob coming around the garage. Knowing that I need to allow for this 2700 opening through here. Obviously, they're not going to have a 40mm hob coming along through this garage opening. Offset 450 and then 2700. Save. Okay, and there's my slab set out.

12:12

Now I will go through and dimension that and double check that with my drawing before I continue on with the wall frames. DM. What I like to do also, is work my dimensions from the centre outwards. Then I would run measurements coming from these points going out that way, from this line going out this way, and also from this line going out this way, and back this way. Anything on this side of this line will be up here. Anything on this side of this line will be down here and so on and so on.

13:47

I use the DM command. Coming back to this slab, back to there, through here, through there and there. I've also created, as you probably noticed, some layers of my own and also some dimensions of my own, which is the standard AutoCAD thing that you can do, which you should know how to do anyway. Coming from here, through there, through there and then there. And that will give me all my measurements coming through to this point here. Again, on this side. Working from this line again. Yes, I know I've got it on the other side, but I like to show it on both sides. That's just my way of doing things. Through to there.

15:05

Now I do my vertical measurements. From here, to there, through to there. Again, from here, to there. This one. Dimensioning the opening here. And then coming in through here. Again, on this side, through here and through here. Now we can put an overall measurement on as well. That is our highest point and well throw it on this side, our widest point.

From here, we will go through and check to make sure that all our measurements suit our slab plan to ensure that we won't have any other issues along the way. Once you've gone through and you've checked all your measurements, then we can start laying out our wall frames. Before we do that, I need to put a note here to indicate that there is a 40mm step down and make that centre.

16:39

Middle centre. Move. Copy that. For here and for here. You know that this one here is a 70mm step down. Copy, Ok, save. Once we've checked all our slab, again I will just continue my drawing in this area here but eventually this will become a slab plan, my frames and etc. But right now, we are just going to draw, well I'm just going to draw all my frames on my slab right here. I can turn some of these layers off so they're not disturbing me or distracting me. Now for our drawings we know we need to identify our roof height, our ceiling height.

18:32

As we come through here, we know that our ceiling is going to be 2450. We will need to identify whether we're going to have a direct fix or whether we're going to have ceiling battens. And this drawing here will show that's our bottom chord. There's our truss sitting up here. There's our overhang of 600mm. There's our ceiling. We know that we're going to have a direct fixed ceiling. On that note, there is other information that you need to source, which I have extensive information on this client, and this tells me everything that I need to input into my drawings to actually detail these wall frames.

19:29

But I won't utilize all of what I've got here. Just what I need. Right now, we know it's a direct fix it's got to be a 600-maximum spacing for our roof trusses. So, before we get to the roof trusses, we'll throw in all our wall frames using a non-coded frame. If you've seen the commands, you'll know what I mean. We can do an add by adding a wall frame and coding as we go, or we can do a non-coding as we go, or we can type it in as a PD and that will put a non-coded frame in there. We will use the PD command and then code them as we need them. We want to go from this end all the way through to this end and then offset. Right now, I'm just going to put all my frames in. There are different ways, different methods of putting frames in but I'm just going to try and keep this simple. For now, I will go through and just throw all my wall frames in.

20:50

My first frame up here will be offset back 4135. If you want to see the commands that I use, it'll be showing up in this bottom left corner. I have extensive videos on all the commands that are used in FrameCAD. A lot of them I don't use and me of them are just pretty much natural for me the way I use things. I've been doing this quite a while if you have any questions just leave a comment. At times, it will be quiet on our videoing, just because I've just got to go through and offset all these frames. Number offset 1030. 1 metre. Number offset 2700. Comes through to here and that end. Number offset 1 metre. Which is coming through here. We've got 5Introduction to Single Story50, let's see if we can find that coming in through there, 1600. And then 2915. From there we will come down to this end.

24:17

'SAVE! Your work often!'

And that's pretty much it for our framing offset. From here we will copy that. Move that to the next border. Copy all that. And we will check our frames to make sure that we have them all set up correctly, with the drawings that we have. And there is one frame that I've missed out there. Save. Keep saving. Again, I like to start my measurements from the middle. After a while you don't need to draw lines out, you'll get used to where you're putting your measurements. Of course, you don't want to include your lines into your drawings.

27:41

We'll start from here. I always like to come out from the outside. And this one is through to there. And one through to there. Again, on this side. We're coming in through here, to the outside.

28:01

And then we're going to come through here. And then we're going to come through here. And then we're going to come through here. And also, here. I've just noticed there is another wall frame that I've missed out. And these are the things that you will pick up as you're going through. I've missed out this wall frame here which is offset 1160 and we don't have a length on that wall frame. So, let's offset it first, 1160, and for that length of that frame that we don't have here, I like to do one of two things.

29:47

But most of all, you need to email the client and ask them what that actual length is. But what I would do for now is measure it just so I can continue on going. For me that's not a critical but it is something we need to find out. Of course, I need to check to make sure that my PDF measuring tool is correct. Measure from there to there. We have 900mm. Make sure that we get that checked. Save. Let's go through and make sure that we can read all our measurements. As you can see here, it's getting a bit cluttered. So, I like to go through and just move it so it's all looking good. And you haven't got measurements all over the place. Or anything overlapping. Checking all the measurements. Another one here.

31:48

'Don't Guess – If you are not sure of any measurements,

check with your client!'.

Now we go through, and we check our PDF to make sure that all the measurements that are on the PDF are correct with what we have in our drawing. Once you've done that and you've double checked and ticked off all the measurements on your PDF to make sure that yes, everything is correct, all these measurements are correct, correct, correct, nothing's wrong, then we can move on. But if you do come up with anything that is wrong, you need to email the client to let them know and ask them to verify what the measurement is. Don't guess and put what you think it is like with this measurement here, 900mm. That, I would still ask the client what that measurement is.

33:00

We've got a measurement on this frame here, but we don't have a measurement on this frame here. Just make sure you cover all your bases. Make sure you email the client and ask them what this measurement here is. Once we've got all that set out, the next that I do from here, is I build my trusses.

I don't go through and code my frames. I don't go through and put in all my openings. The only thing I do with walls, is set them out as per what I've done here. My trusses, I need to ensure that my trusses will pass, and I need to know what frames I need to load on to get them to pass. There's no point in going through and coding all your frames, putting in all your openings and then knowing that you have to change them again once you get all your trusses in.

33:56

From here, I would again turn off some layers that you don't need to see. This one here I will change that to a different layer just I can turn it off and on, save. From here, I would go through and start tracing out all my pitching points to where my trusses are going to be sitting which is all the way around through here. And then, once I've got all that set out, I will go through and offset my lines to represent the external overhang, which is sitting at 600mm from our frame.