



YOUR SUBMISSION

YOUR DETAILS:

First Name:

Jack

Surname:

Clifford

Email:

xxxxx@xxx.com

Date of Birth:

xx/xx/1xxx

Daytime Phone:

XXXXXX

Mobile:

XXXXXX

ADDRESS DETAILS:

Street Address:

XXXXXXXXX

Suburb:

XXXXXXXXX

Town/City:

XXXXXX

Apprentice of the Year Region:

Hawke's Bay / East Coast

Postcode:

XXXXX

EMPLOYER INFORMATION

**Company Name**

Christie Builders and Joiners

Contact Person

XXXXXXXXXXXXXXXXXX

Postal Address

XXXXXXXXXXXXXXXXXX

Suburb

XXXXXXXXXXXXXXXXXX

Town/City

XXXXXXXXXXXXXXXXXX

Postcode

XXXXXXXXXXXXXXXXXX

Daytime Phone Number

XXXXXXXXXXXXXXXXXX

Mobile Number

XXXXXXXXXXXXXXXXXX

Email Address

XXXXXXXXXXXXXXXXXX

APPRENTICESHIP INFORMATION

Training Provider

☒ BCITO

☐ Other

Start date of on-site apprenticeship (you need to have completed at least 2 years by Tues 6 June 2017 to be eligible)

10/07/2014

Training advisor

Grant Tester

Training advisor daytime phone



XXXXXXXXXXXXXXXXXX

Training advisor mobile

XXXXXXXXXXXXXXXXXX

Training advisor email

XXXXXXXXXXXXXXXXXXXXXXX

Other building qualifications - you can include information about other Unit Standards you have achieved here:

WHY YOU?

What sets you apart from other apprentices? Write about talents like your leadership skills, skills on the tools, your self motivation and initiative, communication skills and how you work with workmates and clients. You might want to talk about what plans you have for your future career and where you hope your apprenticeship will take you (approx 120 words).

Why do you think you've got what it takes to be the Registered Master Builders CARTERS 2017 Apprentice of the Year?

The reasons I should be this years apprentice of the year is because i have covered a wider range of the construction process because my company is also an exterior/interior joinery and plumbing business which i have learnt about and completed numerous jobs in both areas throughout my apprenticeship making me a well rounded Tradesman. I have also been the Foreman/Site manager on various sites towards the end of my apprenticeship and i am now currently training my own apprentice. This has enabled me to learn the various skills to run a safe and efficient site and deal with clients, council and other sub trades.

MY PROJECT DETAILS

Provide details of a project that you are currently working on or have completed while you were training (try to make it a project that the judges can view for your site visit). You should talk about:

The advanced skills and learning you used on the project.

The initiative you showed following plans and working to code specs.

You can include photos and plans - you will need to have your employer's permission, and you might need to get the permission of your client.

You can view example entries from previous winners on our website. Click update to save your entry, and Logout (or go to a new internet window) and go to the Entries page of the website and scroll down to 'Completed Entry Examples' to view these.

You can choose whether you would like to submit your project online or in hardcopy.

- ☒ I would like to submit my Project Details online
- ☐ I would like to submit my Project Details in hardcopy

You can either describe your project in this box or upload it as a document by using the button below (if you use the box, you can still upload photos or plans using the upload button)

Choose File (None)

CLIFFORD Project.docx



Please send your Project Details to your local AOY coordinator at the address given below:

EMPLOYER REFERENCE

We also need a letter from your employer telling us the following about you:

- What makes you stand out from the rest, and why do you deserve this kind of recognition?
- What has your employer been impressed by during your training?
- Your employer should also describe the skills you have mastered, any initiative you have shown, your enthusiasm and dedication to their business and the trade.
- What makes you different from your peers and why you are an asset to their company.

This should be approximately 120 words.

Your employer must include the following text in the letter with a signature.

I, being the employer of the entrant, hereby declare that the information included on this entry form is correct and I give permission for the entrant to participate in this competition and the judging process. Should my apprentice have a site visit with the judges, I agree to be onsite for this, or will arrange for the apprentice's foreman or supervisor to meet the judges onsite. I further agree to allow, should the entrant receive an award, permission for him/her to receive the benefits of the award without penalty. I also agree to have my details provided to the sponsors of the competition and acknowledge that I am aware that I may receive marketing from these sponsors.

Please ask your employer to send this letter direct to your local Apprentice of the Year Coordinator.

Contact and address details are listed below.

This box will be ticked when your employer has sent the reference to your local AOY coordinator.

☐ Employer reference sent

EDUCATION AND TRAINING ADVISOR REFERENCE

We also need a letter from your training advisor/coordinator telling us the following about you - (there is a template for this letter on the website under 'Entry' and a list of questions that will need to be covered in the letter is also available. The letter should state the following about you:

What has impressed them during your training?

Here your training coordinator should write about the progress that they have seen as you have worked towards your National Certificate. They can talk about your attitude to learning, uptake of skills and personal motivation to improve your skills.

Your training advisor needs to include a start date for your on-site experience and advise how far you have progressed through your National Certificate so we can verify the application (approx 120 words).

Please ask your training advisor to send this letter direct to your local Apprentice of the Year Coordinator. Contact and address details are listed below.

Tick this box when your training advisor has sent the reference to your local AOY coordinator

☐ Training reference sent

DECLARATION

I hereby declare the information included in this entry form is correct and that I have read and understood the terms and the conditions of entry. (These are available on the Entry page of the



website). In regards to the details supplied on this entry form, I confirm the project is all my own work and that I have not been assisted in the preparation of these details. I also understand that failure to provide correct information may result in my disqualification. I agree to participate in any media activity surrounding this competition.

Your Declaration

☒ I agree to the above

CARTERS are proud to be the principal sponsor of this competition. For statistical purposes please tick the box if your employer is a CARTERS customer

☐ Yes my employer is a Carters customer

We suggest you [print out a copy](#) of your completed entry submission for when you meet the judges.

SITE VISIT ADDRESS (IF KNOWN)

If you are selected to proceed in the competition you will receive a site visit from the judges. Please give the physical address of the site for the judges visit. We realise this may change so all addresses will be confirmed with you prior when dates for the visits are set.

6 Gladstone Road, Napier

29/05/17

To Whom it may concern

Apprentice of the Year 2017 Entrant, Jack Clifford.

Jack Started his apprenticeship on the 14th of May 2014. He is employed by Christie builders and Joiners. He had started under the ITab system and changed to BCITO after few months.

Jack is now completed and finished on the 6th Of March 2017.

Jack took to the BCITO way of doing things real quick. He had great guys to train him and he started making process fast.

He was always ready for each of my visits and would focus on the different stages for assessments.

Jack was always keen to be running different stages of the jobs and would push the foreman to let him. This always impressed me about Jack. All of the foreman like that they could let him do this and he would always ask questions when needed.

On my last visit with Jack he was running the new house build. Mike (foreman/ employer) was just overseeing him from time to time.

Jack in an outstanding young man and will go a long way in the industry.

I wish Jack all the best in entering this Year's competition.

Regards



Grant Tester

Training Advisor

My Project for Apprentice of the year 2017

6 Gladstone road



Employer background

From the beginning of my building career I have worked for Christie Builders and Joiners which is a well-established small family run business with an excellent reputation in Hawkes Bay. Generally, the work we do is high end renovations and occasionally new houses. We also have a full joinery workshop and have our own qualified plumber so I have had a wide experience and involvement in most aspects of what goes into a renovation or new house.



Project Background

The Client approached us with a set of approved council plans for a new house on Napier hill where he had an empty section already scraped and ready to go. This was to be the first new house I had worked on which I was looking forward to, although it was not as challenging as the previous renovations I had worked on it was still going to be a challenge as the client was a project manager who had a set date in mind and a project timeline already in place, something I had never really had to deal with before. We were contracted as labour only and the Client was to be the main contractor. Throughout most of the job it was just Mike (foreman) and I who were the builders.

Site Preliminary's

Before the first peg was put in the ground we set up our Site shed and toilet and put up a temporary fence with a lockable gate big enough to get delivery trucks and other machinery in and out of the site and of course all the relevant signage and hazard signs. We registered the job on our Lock n Load health and safety programme, had our first safety meeting which included the Client, Mike and I and then began the set-out with the surveyor.



Site set-out and Foundations

Once we had our offsets to the boundary and a square line to work off from the surveyor we roughly marked out the house slab so we knew where to set up our profiles. Mike and I decided we would set up a profile around the entire perimeter of the house leaving a gap to allow the excavator to get in and dig out our footings. This way we could also use the profile as part of the caging for our reinforcing that had to go into our footings. We also checked that the house would be under the recession plane and to be on the safe side we had to drop the finished floor level by 150mm. We also decided we should have a 7mm drip-edge from the edge of our exterior walls to the edge of our slab and it would be easiest to bring the slab in 7mm each side instead of trying to change the

frames. The foundation was to be a concrete footing with a block ring foundation on top. Due to the Site being sloped we had to step down our footings gradually in 2 block courses at a time. Because of this we had to talk to our reinforcing supplier and get them to make us up step bars for our longitudinal reinforcing in our footings. I also had to build a timber retaining wall at the back of the site which acted as a good infill job while waiting for the excavator to dig out our footing trenches and the Plumber to get his drainage and sewer pipes in. We laid the reinforcing steel according to the plan and after our final check over that everything was ready and in place we called for our footing inspection and then poured the footings the following day using a concrete pump, something I had never used before so I had to be vigilant in terms of protecting the public and communicating with everyone on site what was happening and discussing the hazards that could arise which was a great experience.



Concrete slab prep and pour

The slab was relatively straight-forward with a few thickenings for point loads and 2 foundation pads that had to be a solid 600x600x600 concrete footings, this was where the two legs of the steel portal frame were to sit. I set out where these thickenings and pads were and then explained to the block layers to leave a gap in their blocks for the structural steel footings. Once the blocks were laid I made up 2 forms out of plywood and 4x2 and braced them against the blocks. The slab also specified to have 50mm

polystyrene insulation laid throughout the entire slab and that our polythene was to go down the inside walls of our blockwork to create a vapour barrier. To protect the polythene from our hardfill we laid 20mm polystyrene sheets over the top of it and then filled against that. Once the blockwork had been filled and the Plumber and Electricians had their services in place we



got the bob cat driver back on site and began loading hardfill in, compacting it in layers until we had it to 175mm below our finished floor level (allowing for our 25mm of blinding sand and 50mm of polystyrene insulation) to create our 100mm concrete slab poured with 25mpa concrete. The reinforcing and mesh was all standard D12 apart from one thickening which specified to have two longitudinal high tensile D12's.

A garage door rebate also had to be formed with specific measurements and a 3-degree pitch that were stipulated on the plan. Once we got our pre-pour slab inspection and confirmed with the sub-trades that all the services were in place we booked in our concrete placers and ordered the concrete and another concrete pump.



Structural steel and framing

The frames and steel portal frame had already been pre-ordered for this job although we did have to specify that our frames were to have H 3.2 bottom plates. we decided it would work best for the steel portal frame to go in first.

Once the slab was cured I organised Red-Steel to come on site and get their bolts in place for the steel. I set out where the legs were sitting on the slab for them and gave them a line to work to and specified that they must use Epcon C-6 to anchor the threaded rods in place as it was called for in the Specifications. The steel also required a producer statement from the engineer once it was bolted down in place. I organised for Totals (pre-nail company) to deliver our ground floor frames and got the truck driver to drop the packets on the slab as close to where the frames were going to go. Before we stood the frames, we put Malthoid on all our bottom plates and drilled out where services were coming through.

Using my previous knowledge from standing frames I determined which the longest wall was, made a straightening line 100mm in from the face of the bottom plate to get our first wall line nice and straight and then we began standing the frames and working everything off the first lot of walls we stood.



Once we had stood all our frames we fixed our bottom plates down, plumbed our corners and straightened our top plates. I then went and sorted out where all our hardware was to go and what we needed to get on before we built our floor for the first floor. Our floor joists were 300x45 H1.2 SG8's spaced at 400mm centres and joist hung at each end into the double joist around the perimeter of the floor apart from one side which was specified to use 2 300x45 LVL beams as it was spanning across the lounge area below. Once we had our sub floor framing



in place and all hardware on we set up an edge protection around the perimeter of the floor and had our plywood craned onto the floor framing so we didn't have to carry the sheets up there individually. We used 17mm CD structural ply with the plastic tongue and groove joints for our floor and in the bathroom and water closet areas we used H3.2 treated ply. The manufacturer's instructions specified to use 10 gauge 65mm screws at 200mm centres for the perimeters and 300mm centres for intermediate joists, we also had to use a construction adhesive such as gorilla grip 1 hour cure and to step the ply in 5mm from the edge of our floor perimeter to allow for expansion of the sheets. Through-out my apprenticeship I have always been told that when using a product, I should always follow the manufacturer's instructions with utmost care to ensure if there are any product defects I will not void the warranties due to incorrect installation of the material.

Once our floor was laid we put a temporary set of stairs in for easy access from the ground floor to the first floor. I organised for our first floor framing to be delivered on site, we had a safety meeting before this commenced to figure out the safest way to unload and stand the frames and any hazards that would occur during the operation. We got the frames craned onto our floor and using the same process as I did with the ground floor frames we stood our longest run and then squared our walls off our first wall using a 3 4 5 triangle. Once our frames were plum, straight and braced I began putting on all our hardware and Mike placed an order for our rafters which were hyjoist rafters. For the first-floor roof, they were the 240x63 size and the ground floor roofs were the 240x63 over the master bedroom and over the lounge area we used the 300x90 size. All rafters and jack trusses were set out at 900 centres max with pryda strap brace every 50m square. Since the house was in an extra high wind zone we had to use hurricane straps over each end of our rafters and have 2 blue screws at each point where a purlin would cross a rafter.



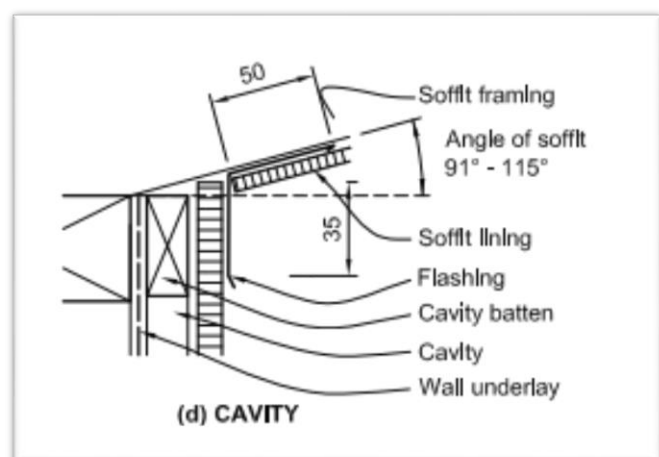
The order we built the roofs was all framing on, then edge protection and netting under rafters was put up to comply with health and safety. We then got our pre-wrap inspection for all framing and then got the first-floor roof, fascia and spouting on. The edge protection and fall netting was then taken down and then put up around the ground floor perimeter and roof areas. Then we had the ground floor roofs installed. Scaffold was then carefully re-erected on top of the ground floor roof so we could continue with work to the first-floor framing with our cavity system and exterior cladding.



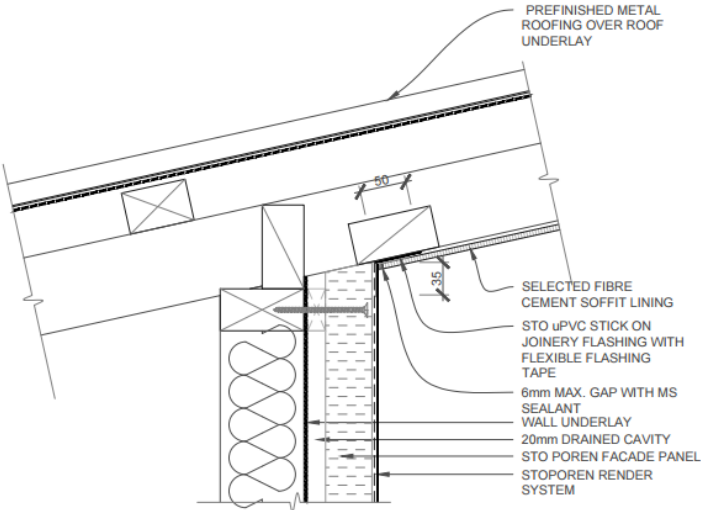
Rigid air barrier and cavity

Our goal was to have the roof on and all the plywood fixed onto the framing before the end of the year so the frames would not be hammered by the sun over the summer holiday. We used 7mm Eco ply as our building underlay which was a system we hadn't used before so I did some research online and found the manufacturer's instructions and checked in the specifications for fixing details and what was required to make it a water tight underlay. I set out our sheets on the framing and got the quantity from this method as well. The plans had specified that the Eco ply was to be used as a brace which meant it had to be fixed off using 65mm stainless ring shank nails at 150mm centres around the perimeter and 200mm centres on every intermediate stud. The Client enquired why we had to use stainless nails and I had to explain to him about the corrosion zones and that he was in corrosion zone d which is the highest risk zone and stainless steel must be used, I also showed him photos of galvanised fixings reacting with CCA treatment and how it could cause major problems for him in a few years' time.

We also had a few debates with various council inspectors when it came to getting our cavity signed off because as soon as they saw the Eco ply was being used as a brace they went to look for the hold downs which we did not actually have to put in as there are 2 different types of Eco ply bracing systems, one that requires hold downs and one that does not. Fortunately, Mike and I had done our homework and were quickly able to explain to the inspectors that we were correct. We then taped all our joins, window openings and penetrations using the Eco ply bandage tape and sill tape. We also had to install a PVC Z flashing where we had horizontal joins. We then put on our 20x45 h3.2 Cavity battens where we had our Linea cladding and organised with INEX (Exterior plasterers) to come and begin to start putting on their cavity system. Once we were happy with our cavity we got our cavity inspection and then began setting out our cladding so we had a quantity for our weatherboards. We also then got our soffit framing in and put our soffits on which were 4.5 mm hardies with plastic jointers. We had to leave the high side of the mono-pitched roofs without a soffit lining on as the plan specified that the exterior cladding was to go right up to the underside of our soffit framing. Then a right-angle flashing was to go onto our soffit blocking and down onto our cladding and then the soffit lining could go on after that, this is a standard detail which can be found in the E2 AS1.



The exterior plasterer did not want to use this detail on his system as he said it was not aesthetically pleasing on his finished product. He wanted to use a membrane tape that would go onto the soffit framing and then down onto his aerated concrete substrate and then he would plaster over it. Although this detail was not in the E2 AS1 it was in the Plaster system manufacturers instructions so we were happy for him to do this and the client agreed.



NOTE:
MAX.ANGLE OF SOFFIT RESTRICTED
TO BETWEEN 91°-115°

SCALE 1:5

STO POREN FACADE	STO POREN FACADE SYSTEM RAKING SOFFIT - STO uPVC CONTROL JOINT	PP 604
		2017

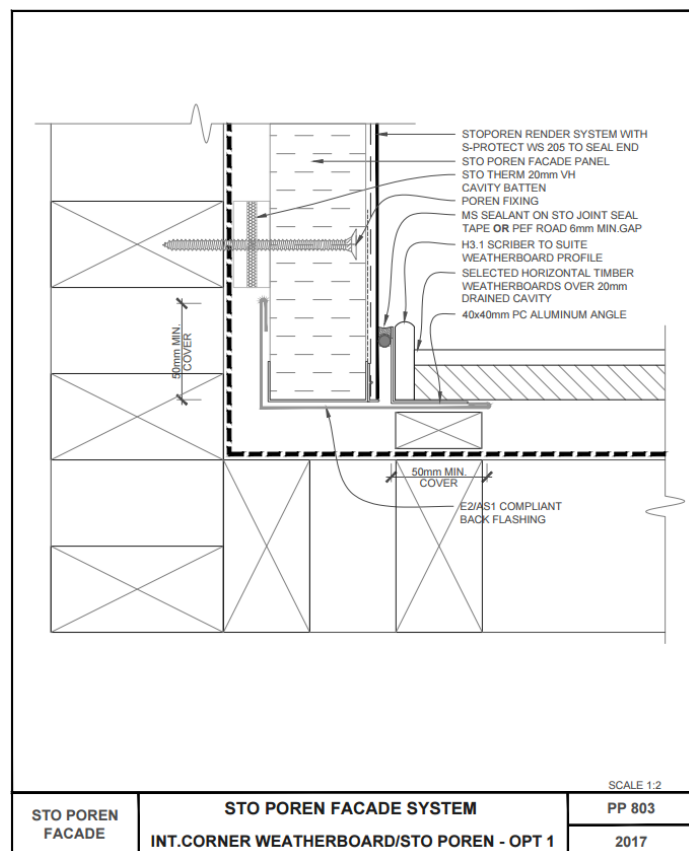
Exterior joinery

Before any cladding could go on the exterior joinery had to be installed with the head flashings on as they needed to be inspected. All joinery was double glazed with safety glass in the bathroom areas. I measured all the jamb widths which varied between the different cladding systems and in some areas, we had 6x2 framing which also had to be considered. The head flashing details were also different widths between the linea cladding and the plaster system. All head flashings were made of powder coated aluminium and were fixed back to the Eco ply and then had head flashing tape put over them. The only change that was needed to be communicated back to the aluminium joiner was the glass in the upstairs bathroom was not to be frosted as it would block the view out to sea.



Cladding

We were using the 180 series James Hardie 18mm bevel back weatherboard with tongue and groove joints at each end. I went and set out our weatherboards using a story rod and making sure that we would have a full board running above our head flashings as this is the look the client wanted. The Client also specified he wanted to use the aluminium external boxed corner detail which had to go on before the cladding was put up. We also had four internal corner cladding junctions which we used the detail provided by the plaster system and E2 AS1. This involved putting a right angle aluminium flashing up the internal corner leaving an 8mm gap off the finished plaster and our weatherboards would go over the other side of the aluminium. The gap between the plaster and the Aluminium was then to be sealed with a PEF rod backer and Bostik Seal n Flex or Sika 11FC (A paintable sealant as it was going to be seen) and the weatherboard side was to have a scribe put on.





Interior Linings and Finishing's

Once we were closed in we began to straighten the framing and sort out fixings for units and various other fixtures. I referred to the plan where all our bracing walls were and marked them all out on the floor then put in Gib Handibracs' where applicable. We were using Rondo ceiling battens everywhere and 13mm gib standard and gib aqua line for the ceiling sheets. In the lounge/kitchen area there was a ceiling diaphragm that covered the entire ceiling, the rondo batten in this area had to be directly fixed to the rafters instead of using clips, there was also a small wall that formed the end of the island unit in the kitchen that had to be fixed in place after the ceiling was installed as you cannot have any penetrations in a ceiling diaphragm unless they are engineered. Pink fit put all the insulation in which was nice for a change as every other job I had been on it had been my job to do the batts. All insulation R values were increased by the client so we had R5 ceiling batts in all roof spaces, R4 batts in our sub floor and 6x2 exterior walls and R3.6 pink batts in the rest of our exterior walls. Once we had our pre-line inspection signed off we got all our ceiling sheets up followed by our wall

sheets, I had to move a few of the electrician's flush boxes as they were not at least 90mm away from the edge of some of the braced sheets. The ceiling diaphragm was fixed off at 100mm centres around the perimeter as it was over 9 metres long. To ensure we weren't going to be waiting for the gib stopper to finish before we could put our finishing's on I got all the braced sheets on and then called for a



post line inspection so the stopper could begin plastering. We finished upstairs first so the gib stopper could start up there while we finished gibbing downstairs. I then swapped over with the stopper and began hanging interior doors and putting finishing's on upstairs while he carried on downstairs. There were two showers that had acrylic liners and glass doors that I was left to install. This was a great experience for me as I had always just helped someone else put them in but never been left to install them alone.

The skirtings were 100mm x 18mm pine single bevel and the architraves were 60mm x 18mm pine single bevel, this was a disappointment for me as at the beginning of the job all finishing's were going to be Rimu colonial style which we would have run at our workshop and would have been a challenge for me to fit but due to the client's budget sacrifices had to be made. I have had to learn to deal with these sorts of changes on various jobs and still try and make the finished product look as best as it can by using my skills I have learned throughout my apprenticeship.



Job Completion

Due to the Client having to go away and budget constraints the job was put on hold after the driveway and entry path was poured and we are yet to go back and install the kitchen and get code of compliance. The plumbing and electrical fit off have been completed and the client has been painting the house himself. We have installed a temporary kitchen for him as well so he can live in the house. Although I did not get to finish off this house I still felt very satisfied being able to look at a new home I had built on a once derelict looking section.

Throughout this project I learnt some new skills having never done a new build before and was also able to apply some of my skills I had learned from doing renovations. I got to run most parts of the job, order materials and organize sub trades which I executed well and received good appraisal from the client who was not an easily impressed person. All of this led to me being signed off towards the end of the build, a result I was extremely pleased with.