





# Winds of change



Joe Fallon and his wife Deirdre moved to County Wexford in 2006 to start a family, build a house and further develop Joe's architectural practice. Talk about new beginnings! Their first step was to buy a 200 year old cottage in the heart of the Blackstairs Mountains, leaving behind them the hustle and bustle of city life...

"IT'S FUNNY, ARCHITECTS that get to build their own house always have difficulty in finalising their own plans! I was the same," says Joe. "I tried to put in everything, and designed many different options. I got carried away without realizing it... Deirdre and I were on holidays in Barcelona when she flipped. I kept changing the house from a three bed to a four with very small hot press, then to a five bed. She said 'just stop' and I did. I might still be designing the house if it weren't for her!"

Design involves a great deal of compromise, he says. "When I meet with clients, I insist on sitting down with the couple – men and women can have totally different views, and they need to come to an agreement. In fairness, women are normally more practical. Men, on the other hand, often just want a nice room to retreat to and chill. When I was designing our own house, I was thinking as a single person. For example, a drying cupboard was down on my list of priorities. Deirdre, on the other hand, insisted on an entire room."

"I had a bit of a bachelor pad in mind, I'll admit. The landing for instance wraps around in such a way that I can now see the dangers of having children climbing over them, even though it is 1200mm high! As a parent I suppose you worry about everything. We were thinking of retrofitting a glazed unit all

around for safety." But Joe says they have no regrets, especially over the high level of finishes. "I've seen too many people being sorry they didn't spend a few extra bobs on something they really wanted, biting their lip. Deirdre and I thought that since we were only going to be doing this once, we might as well do it right. By choosing double ▶



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*Above: Bog oak and floorboards bought from a salvage yard; flagstones around the fireplace salvaged from the original building*

height ceilings we knew our heating bills would be higher, but the views are just spectacular, it's a sacrifice we're happy to make. We really enjoy living here, which is what counts."

In the summertime, the glazing allows the light to flood the space and heat it through passive solar gains, but in the winter, sheer volume makes it a little harder to keep warm. So what Joe came up with was a way to compartmentalise the rooms downstairs. "Between the kitchen and the living room we have a 3m wide oak and glass sliding door, which when closed back is retracted into a false partition wall. This is both aesthetic and practical, helping to reduce the space to heat in winter time."

#### **New build**

"My mother's cousin was selling an old farmhouse, which dated back to the 1700s," says Joe. "The main building was derelict but the outbuildings were fine – they even had a roof! It seems like it wasn't as well built as the outbuildings; there definitely wasn't the same level of craftsmanship. So we quickly realised that a



sympathetic restoration would be too expensive for us. Plus, the house was of a cottier style, which is a cottage with low ceiling and windows. Not only are they not compliant with the building regulations but I'm tall, so it would have been difficult for me to keep the existing dimensions."

As for planning, they didn't run into any problems. "We were lucky in that we weren't asked to do it up by traditional means, and were able to demolish the cottage," adds Joe. The Fallons therefore knocked down the main building and built a new home on the same site. The outbuildings were left for a later date. "We kept the good stone and buried the rubble," he says. "The demolition contractor had a difficult job as I painstakingly made him save all the flagstones and granite lintels while he knocked the old building



*Above: The Fallons got everything they wanted in this once-in-a-lifetime project*

with a 20 tonne digger! The salvaged stone we put over the new doors and we saved whatever we couldn't use; the flagstones we put in the hallway and around the fireplace."

In fact, finding the right tradesmen was key to the success of Joe and Deirdre's build. "One of the tradesmen we employed was a young carpenter, Julian Rothwell, who was just starting out on his own. He was recommended to us by our tiler for his meticulous attention to detail, which shone through. On some parts of the build, where the timber and detailing was not standard, he presented options that I had not considered. We became good friends and I found it great to work with a professional who taught me a lot about carpentry and joinery. Unfortunately Julian passed away last year, but he has left his craftsmanship throughout our home and we were so lucky to have found him.

"This year I built the play area out in the back garden for the kids, as a labour of love. I'm not a carpenter, and I can be impatient sometimes... I used to have the notion that if I started something it had to be finished by sundown! Julian instilled in me the need to take your time, and to do it right the first time. It's better to do it that way than having to go back three or four times to fix it. I built it by using railway sleepers, which I stuck into the ground upright in poured concrete. Then I braced them with timber, and built the structure up from there. There's a fantastic view looking down the valley and we like to sit out there with a glass of wine in the summer evenings. I enjoyed working with timber, the smell of the fresh cut wood. But at the end of the day you can't beat each man at his own trade."

Indeed, Joe had to rely on local knowledge to find his tradesmen, as he wasn't familiar with the area when he first moved there. "At the time, I was working three days a week in Dublin, which gave me the opportunity to act as project manager. I had a local engineer oversee the structural elements and I covered the rest. As I worked in the industry I called in every favour I had coming to me – suppliers of building materials, specialist traders, you name it!"

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The downside to building on a mountain are the springs, and they hit a few while digging the foundations. "We had to redirect them to be able to put in the concrete footings. It was especially tricky because we were doing this in winter, when springs pop up," says Joe. As for the build itself, they chose a hollow block single leaf construction, rather than using standard concrete blocks with a cavity wall. "It was quicker to build and since we wanted to get in as soon as possible, that was certainly a consideration. Also, it worked out ▶



*Above: The barn refurbishment consists of a games room upstairs, as well as a wheelchair accessible bedroom and bathroom downstairs*

cheaper – even though the material costs are a bit higher, because the blocks are more thermally efficient, the labour costs were lower because less time was spent on site. We then chose to insulate from the inside of the house, because I wanted to create a thermal envelope. However, this means that the masonry wasn't left exposed so it can't

store the heat that's coming out of the stove and of the radiators. When we open the front door, the heat can escape." The Fallons have a porch to act as a buffer, which helps considerably, but there is no hallway so draughts can be felt if the children leave the front door open for too long!

"It was recommended to us to batten the inside wall with 2x2s and screw insulation on top of that. This resulted in draughts from the cold roof to the skirting boards. The wind was getting in through there, down through the space between the battens and the wall and into the living room. It's got to do with the structure of the roof so we couldn't stop it from happening. Nowadays the advice is to mushroom fix the insulation directly onto the walls to avoid this." Then, about two years after they'd moved in, the house flooded, which was in some ways a blessing in disguise. "Since we had to deal with the water damage anyway, we took the opportunity to seal up the skirting boards with silicone to prevent the draughts from getting in," adds Joe.

As could be expected from the design, the Fallons spent the largest chunk of their budget on the windows, at €20,000. "The natural light is great, we really don't need much artificial lighting. We put in energy efficient halogen downlighters but in my home office I put in a 500W tungsten bulb to make sure I'd get enough light! Now, there's halogen equivalents I can use. LEDs at the time were expensive and CFLs don't come as



downlighters.” And, despite the lack of mechanical ventilation, (which also partly adds to the heating requirements), the house is airy and fresh. “We just have basic trickle vents and mechanical extractor fans in the bathrooms. But we do open the windows a lot.”

“As a designer I am very aware of using sustainable products where I can so for both aesthetic and environmental reasons we chose sustainably sourced pine windows... Although the ones we bought were perhaps more suited to a Nordic climate, than to a wet and humid one! We have had to recoat the pine but that’s what you get with wood – maintenance!” Joe is a fan of timber, and his appreciation for this versatile material has grown over the years. When the time came to build his own home he went all out. “I fell in love with timber and I’m still smitten. But it takes commitment! I think cedar is gorgeous so I used it on the fascia and soffit, but it does need to be painted every five years.”

In terms of their heating requirement they opted for an ordinary condensing oil boiler. “We thought of geothermal but felt it was in its infancy at the time, and that it was a lot of money for something that wasn’t 100% proven just yet. A wood pellet boiler was also something we looked at but at the time pellets were hard to get. And if they get damp you can’t use them. The condensing oil boiler cost us €500 and I thought, if there’s a new and better system we can avail of in the future, it won’t be a big thing to put it in and replace what we have now.”

### Since they knew they wanted a log stove inside a traditional looking fireplace, they decided to harness the energy from it.

Since they knew they wanted a log stove inside a traditional looking fireplace, they decided to harness the energy from it. “We put a backboiler onto the stove to feed into the radiators, but it didn’t work – it took the heat out but it wasn’t being pumped to the heat emitters. We had bought a twin coil cylinder to service the back boiler, but eventually disconnected it as it was inefficient,” says Joe. “Since we didn’t use the twin coil feature for the stove backboiler, we could use it with the solar panels we retrofitted six months ago.”

At the beginning he was skeptical of the capital outlay required. “As a qualified BER assessor I was very much aware of energy efficiency and associated payback costs but it worked out very well for us. By rerouting the system from the backboiler to the solar panels it only cost us €1,500 to buy the panels and install them, thanks to the €850 grant we got from the SEAI. That means our payback should be in the order of two years, which is very good. Of course, that’s because we already had the twin coil cylinder.” This means that Joe and Deirdre no longer have to use oil for five months of the year, as the solar panels are enough for all of their hot water requirements. “We chose a model that reduced the number of tubes we would have had to install in order to service our 300 litre tank. We used a high efficiency system,



*Above: The windows provide views and light, but do contribute to some heat loss*

with a reflective layer at the base of the tubes, which allowed us to put in just 18 tubes on the roof, instead of the 30 we first envisaged, with the added benefit of aesthetics.” Six months on the Fallons are very happy with the system.

Not only have ‘eco’ products become cheaper since Joe built his home in the mid-noughties, energy efficiency has also become increasingly important. So much so that when the Fallons were building their home, they thought they were future proofing it. “At the time I specified a high U-value, but if you compare it to today’s standard, it’s average – even though we put in four inches of composite board insulation, 25mm more than what would have been expected.” Another eco-feature of the home is that for both the new and refurbished house, they sourced what they could second-hand. “We found ten inch pitch pine boards from a salvage yard near Naas, which originally came from a church in Belfast, and we used it as flooring planks. The bog oak on the fireplace is also from the same salvage yard. And we found the cast iron bath, as well as the radiators, in other yards. One of the door handles for the sliding screen we bought while we were on our honeymoon.” This of course, ties in with their desire to keep the charm of the cottage alive, rather than feel like they live in completely new accommodation. ▶



*The upstairs windows were built smaller and closer to the ground to make sure the new house would not overshadow the barn*

### **Barn refurbishment**

“We always wanted to make sure we didn’t take anything away from the old farm feeling,” says Joe. “In the main house, we built the upstairs windows smaller and closer to the ground to make sure the new house would be sympathetic to the environment, and not overshadow the barn. That means that with small children the windows are always locked, but that’s fine.” In fact when Joe and Deirdre were ready to do up the barn, about two years ago, three years after their new build,

they were able to sympathetically refurbish it because so much of it could be salvaged. “We kept the entire wall and roof structure; it was then more a question of linking up the old with the new, as the two buildings were about one metre apart.”

They got a stonemason from the area to reuse the salvaged stone from the cottage to build the bridging wall. “The new stonework is flawless, you really can’t tell where his work begins and the original ends,” says Joe. “He picked out the pieces from the old home and cut it up to match. He did some repairs to the wall as well, as the barn had been half knocked down due to age. Actually, the most important thing was making sure the floor was level with the new house. Since there were no foundations in the barn, we left it as is. The engineer said it didn’t need shoring, and that it certainly wasn’t going to fall down! So when I poured the concrete floor with the help of my cousin Mick and local farmer Pete it was all hands on deck, we made sure it was aligned to the radon barrier from the new house, which we used as a guide. There is a special buzz on a building site when concrete arrives, I have seen grown men go into a tizzy, I think it’s because it’s such a physical job that no man wants to be seen to be slacking off on the shovel!, and also because concrete sets quickly and you need to do it fast. The lads were duly paid with a bottle of beer.”

As for the walls, Joe chose a cement and screed plaster. “On the inside, the walls were very uneven, so we filled them in with the plaster mix and let it dry out. Then we put in a four inch gap to





vent the wall and put in battens with insulation board, skim coated. Upstairs we kept the stone exposed, as it was in better condition, and applied some universal PVA on the bare wall to protect and to prevent dust from falling off it.” Downstairs in the barn they put in a bedroom and a bathroom, both of which are wheelchair accessible. “Upstairs is where the games room is. I call it the games room but it could be used as a granny flat for the kids when they grow up. Downstairs we may well use in our old age or if for some reason one of us becomes less mobile.”

As Joe says, they intend to live in this home for the rest of their lives, and they built it accordingly.

As Joe says, they intend to live in this home for the rest of their lives, and they built it accordingly. “I was born and raised in Dublin, and Deirdre is originally from Mullingar. We both love hill walking and the outdoors so where we have built our home is ideal. And with the friends and neighbours we now have, we are absolutely delighted we made the move to Wexford,” says Joe. “Granted, it can get isolated, especially with the fog!, but it’s a way of life I’ve really come to enjoy. We were lucky because we got everything we wanted, our house was tailor-made. Deirdre got her walk-in hot press and I got my games room. A win-win situation!”

**House size:** 3,500 sqft (including barn 1,000 sqft)  
**Site size:** 1.5 acres



### BUILD SPEC

**Construction type:** masonry, cold roof  
**Insulation:** 92.5mm rigid urethane insulation board  
**U-values:** roof 0.20 W/m<sup>2</sup>K, floor and walls 0.21 W/m<sup>2</sup>K  
**Windows:** FSC-certified pine frame, double glazed, 16mm argon filled, low-e, thermally broken ■

Astrid Madsen



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**Architectural Technologist**

Joe Fallon Design, 2011 Finalist of the CMG Architectural Practice of the Year Award, Dublin 6w, tel. 01 4505471, and Enniscorthy, Co Wexford, mobile 087 2566808, [www.joefallon.com](http://www.joefallon.com), email [joe@joefallon.com](mailto:joe@joefallon.com)

**Building materials**

Heiton Buckley, Gorey, Co Wexford, tel. 053 9421317

**Electrician**

Michael Fallon Electrical, Holywell, Co Dublin, mobile 087 8348180

**Ground Works & Demolition Contractor**

Michael Ryan & Son Plant Hire, Enniscorthy, Co Wexford, mobile 087 6533846

**Insulation**

Kingspan Insulation, (Kooltherm K18), Castleblayney, Co Monaghan, tel. 042 9795000, [www.insulation.kingspan.com](http://www.insulation.kingspan.com)

**Internal Doors**

Doras Distributors, Dublin 22, tel. 01 6235444, [www.dorasdist.com](http://www.dorasdist.com)

**Natural roof slates**

Tegral Roof Slates, Athy, Co Kildare, tel. 059 8631316, [www.tegral.com](http://www.tegral.com)

**Salvaged Timber**

Dean Duncan, Naas, Co Kildare, tel. 045 901801, mobile 086 2336792, [www.oldsalvagewood.com](http://www.oldsalvagewood.com)

**Solar panels**

Manufacturer Carey Glass, (PS 18 Solar Panels), Nenagh, Co Tipperary, [www.careyglass.com](http://www.careyglass.com)  
Registered SEAL Installer, Mick Martin, mobile 087 6900911

**Photography**

Dermot Byrne, Bray, Co Wicklow  
[Dermot@dermotbyrne.ie](mailto:Dermot@dermotbyrne.ie) 01-282-9560  
mobile: 087-2505-384

ROI calling NI: prefix with 048 NI calling ROI: prefix with 00353(0)