An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage



Terms of Reference for Society of Chartered Surveyors Ireland (SCSI) Report on Construction Costs for the Defective Concrete Block Scheme 07 February, 2022







Contents

Terms of Reference for Society of Chartered Surveyors Ireland (SCSI) Rep	ort on
Construction Costs for the Defective Concrete Block Scheme	4
Appendix 1: Specific Construction Cost Report Content	10
Costings Required for Remediation Option 1	10
Costing Methodology for Remediation Options 2 – 5	12
Appendix 2: Background Note	13
SCSI 'Guide to House Rebuilding Costs for Insurance Purposes' – key point divergence	
Indicative Cost Per Square Foot (psf) Set by the Department for Option 1	17



Terms of Reference for Society of Chartered Surveyors Ireland (SCSI) Report on Construction Costs for the Defective Concrete Block Scheme

- 1. The Department of Housing, Local Government & Heritage ("the Department") is the department with responsibility for a scheme established under the Dwellings Damaged by the Use of Defective Concrete Blocks in Construction (Remediation) (Financial Assistance) Regulations 2020¹ (S.I. No. 25/2020) ("Defective Concrete Blocks Scheme" or "DCB Scheme") under which levels of financial assistance are to be provided to eligible property owners for the remediation of damage caused to their properties by the use of defective concrete blocks in their construction. The level of financial assistance is to be determined by reference to a series of options for remediation which options are set out in Table 1 (Appendix 1) below, and range from full demolition and reconstruction of the entire dwelling, to demolition and reconstruction of affected elements only² (the "Options").
- 2. The Society of Chartered Surveyors Ireland (SCSI) is the independent professional body for chartered surveyors working and practicing in Ireland and is a registered charity. The SCSI has been invited by the Department to prepare a report detailing cost calculation methods for each of the Options across a range of different house types (the "Report").
- 3. On the 30 November 2021, the Government approved changes to the Defective Concrete Blocks Scheme. A range of enhancements were agreed, including improvements to the Scheme including increasing the current 90% maximum grant to a 100% grant for all remediation Options 1-5 and increasing

¹ Appendix A S.I. No. 25/2020 - Dwellings Damaged by the Use of Defective Concrete Blocks in Construction (Remediation) (Financial Assistance) Regulations 2020

² Protocol IS:465, published in November, 2018



the maximum grant cap for Option 1 (demolition and rebuild) to €420,000 from €247,500.

- 4. The Government has agreed that the grant calculation methodology for Option 1 remediation works is to be based on a cost per square foot ('psf') based on the size of the existing home. The cost psf will be relative to the average psf construction costs for Option 1 remediation works for a standard specification home under the DCB scheme.
- 5. The current indicative cost psf has been set by Government based on advice from the Department which has been informed by its QS team based on firsthand experience, by a review of remediation cost plans received from homeowners which are Stage 2 approved under the scheme and by the SCSI Guide to House Rebuilding Costs for Insurance Purposes 2021.
- 6. Whilst the SCSI Guide to House Rebuilding Costs for Insurance Purposes 2021 has been of some assistance to date, it is acknowledged by the Department that by reason of the key points of divergence between the Guide and the requirements of the DCB Scheme (set out in Appendix 2) the present Report is required..
- 7. The Government has therefore directed that the cost calculation methodology (based on a cost per square foot) is to be updated in consultation with SCSI and that SCSI would be asked to provide a Report detailing an appropriate and up to date cost calculation methodology for remediation works under Option 1 together with an appropriate cost calculation methodology for remediation works under each of Options 2-5.
- 8. The Department will progress the work needed to give the decision of Government effect, including through revised legislation.



- 9. In furtherance of that work, the SCSI will provide a Report to the Department, on an independent and objective basis, upon the following issues:
 - (i) Up to date construction costs in the North West for the demolition and rebuild (Option 1) of a variety of home types and sizes which have been impacted by defective concrete blocks (see Appendix 1). The costs will be dual reported on measurement in both square metres and square feet;
 - (ii) an appropriate cost calculation methodology for the costing of remediation Options 2 – 5 under the Defective Concrete Blocks Grant Scheme and key issues for consideration in this regard (see Appendix 1);
 - (iii) the Department will require engagement with the SCSI on an ongoing basis to provide updated information on construction costs changes so as to assist the Department in annual reviews of the level of grant assistance to be made available to homeowners under each of the remediation Options 1-5
- 10. The Report shall be provided by the SCSI by 28 February, 2022.
- 11. Each of the SCSI and the Department will name a specific representative who will act as the focal point of contact for this work.
- 12. The SCSI and the Department and the Housing Agency shall meet at such specified intervals as may be agreed to consider and review progress with regard to completion of the work outlined above.
- 13. Background information is provided in Appendix 2. The Department in conjunction with Local Authorities will make such additional documentation



available as may be of assistance to the SCSI and/or make officials available to consult with the SCSI in the course of its work on the above, if requested.

- 14. The Department may share such drafts of the Report as may be agreed with the SCSI with other government departments, including the Department of Public Expenditure and Reform
- 15. Either party may publish the Terms of Reference once finalised.
- 16. The Report provided under the Terms of Reference shall be published following its submission to Government at a time to be agreed with the Department.
- 17. The Minister for Housing, Local Government and Heritage shall set the appropriate grant rates for the scheme based on and informed by the SCSI Report.
- 18. It should be noted that while the Department has previously referenced the SCSI Guide to House Rebuilding Costs for Insurance Purposes 2021, the Report to be produced by the SCSI under these Terms of Reference is a standalone Report and not based on the Guide to House Rebuilding Costs for Insurance Purposes.
- 19. The SCSI will endeavour to address, in the Report, any queries that are brought to the attention of the SCSI by the Department in respect of costs calculation for the purposes of the Defective Concrete Blocks Grant Scheme.
- 20. The SCSI will be the independent and sole author of the Report.



- 21. The Department will use its best endeavours to provide an indemnity to SCSI and the members involved in the preparation and provision of the Report against any liability, loss, claim or proceedings whatsoever arising under statute or common law in respect of the preparing and provision of the Report.
- 22. Copyright in the Report shall be retained by SCSI.
- 23. It is intended that the views expressed and conclusions drawn in the Report to be produced will be the fair and reasonable views and conclusions of the members of the SCSI contributing to the Report based on their consideration and analysis of data provided by the Government and otherwise obtained from relevant market sources. However, neither the SCSI nor any individual member contributing to the Report shall under any circumstances be liable to the Department or any third party (whether in contract, tort (including negligence, negligent mis-statement and/or breach of statutory duty) or otherwise for any loss or damage whatsoever and howsoever arising in connection with the production or content of the Report nor shall they be liable for any actions (or lack thereof) taken by any party arising from reliance upon or in any way using the content of the Report. Readers of the Report will be advised to take advice from a qualified professional when dealing with specific situations.
- 24. Whilst every effort will be made to ensure that the information on which the Report will be based is true, accurate and up to date, the SCSI makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability, suitability or availability of the Report to be produced. Any party using and relying upon the Report would do so at its own risk and the SCSI shall have no liability to that party in any circumstances. SCSI will disclaim any responsibility to update the Report.



25. The disclaimers and exclusions to be included in the Report when produced, shall be governed by and construed in accordance with Irish law. The SCSI has received no payment for this pro bono work which will be performed in the public interest.



Appendix 1: Specific Construction Cost Report Content

Costings Required for Remediation Option 1

Approximate House Size in	House Type	Estimate Re-build	Average Rebuild	Average Rebuild
Sq. Mts		Cost	Costs	costs
		Feb 2022	psm	psf
75	2 Bed Terraced Estate	€	€	€
	House			
110	3 Bed Semi Detached	€	€	€
	Estate House			
130	4 Bed Semi-Detached	€	€	€
	Estate House			
160	4 Bed Detached Estate	€	€	€
	House			
180	4 Bed Single Rural	€	€	€
	Bungalow			
180-210	4 Bed Single Rural Dormer	€	€	€
210		€	€	€
_	4 Bed Single Rural 2 Storey	-		
300	5+ Bed Single Rural	€	€	€

Assumptions

Re-build costs should be calculated on a total loss situation, i.e., the house has been totally destroyed and has to be demolished and rebuilt but existing foundations are sound and remain in situ.

Costs should assume timber frame or brick/block walls, slate/concrete tiled roof, concrete ground floor and timber first floor, rendered finish to external walls,



softwood flush doors and double-glazed windows, painted plaster to walls, plastered ceilings, standard electrics, heating (oil boiler and wall mounted radiators) and insulation.

The Department have suggested that the costs calculations should be based on typical speculatively built homes to a standard quality specification in compliance with <u>building regulations and standards in place prior to the introduction of S.I. No. 854/2007 – Building Regulations (Amendment)</u>

Regulations 2007 by reason of the fact that it is intended that grant rates for the scheme, to be determined by the Minister, will be based on 'like for like' remediation.³.

Costs should also include for;

- 1. demolition and reconstruction costs
- 2. concrete path around the house
- disconnection and reconnection of utilities
- 4. making good to driveway and garden
- 5. professional fees
- 6. VAT at 13.5% on building costs and 23% on professional fees

Costs should not include for

- 1. new foundations
- 2. A Rated/NZEB homes see note above re relevant building standards
- contents such as carpets, curtains, loose furniture and domestic appliances etc.
- 4. outbuildings, garages, boundary walls, driveways, septic tanks etc.

Additional Consideration - Salvage

DCB homes are not impacted on a total loss basis. There is therefore the possibility of salvage and reuse of house components such as kitchens, doors,

³ SCSI agrees to cost rebuild based on 2007 regulations as suggested, however, best practice is to build to current regulations.



radiators, boilers, bathroom furniture, joinery and ironmongery, stairs, roofing materials, built in wardrobes etc.

Whether it is financially viable to salvage and reuse house components should be considered by SCSI by examining the likely savings, if any, which could be made by a homeowner through salvage and reuse of house components to a standard specification of a speculatively built 4 bed detached estate built home of 160 sq. mts. constructed in the early 2000's.

Costing Methodology for Remediation Options 2 – 5

The remediation works involved in Options 2-5 are very different to those which will be carried out under Option 1. It is the quantity of blockwork in the external walls of the dwelling which would appear to be the most relevant consideration. The issue of different house types; terraced, semi-detached, single storey, two storey, dormer, apartment etc. needs further and detailed consideration.

The Department has not determined or set a costing for remediation works under options 2-5. Some work has been carried out by the Departments QS team in this regard but SCSI is asked to consider, in the Report , a method for calculating costs for the remediation works required under each of the Options 2-5.



Appendix 2: Background Note

The cracking of the external walls of dwellings in Donegal and Mayo, due to the crumbling of concrete blockwork, came to light and public prominence in 2013. An Expert Panel was established in 2016, chaired by Mr Denis McCarthy and including representatives nominated by the National Standards Authority of Ireland (NSAI), Association of Consulting Engineers of Ireland and the Institute of Geologists of Ireland, to investigate the matter.

Its Report was published on 13 June 2017, concluding that the disintegration of the concrete blocks used in the construction of the affected dwellings in Donegal and Mayo was primarily due to excessive amounts of deleterious materials in the aggregate used to manufacture the concrete blocks. The deleterious material in Donegal was primarily muscovite mica and in Mayo it was primarily reactive pyrite, meaning that the impact and remediation options were expected to be somewhat different in both counties, with more Option 1 (demolition and rebuild) anticipated in Mayo.

The Defective Concrete Blocks Grant Scheme

The Defective Concrete Blocks Grant Scheme was signed into law under S.I. No. 25 of 2020 on the 31 January 2020. It is a grant scheme of last resort which was put in place by Government in order to voluntarily assist homeowners who are in a very difficult position, with no other apparent options open to them to remediate actual damage to their home owner occupied principal private residences and financially assist people so they can remain in those homes. It is not a compensation or redress scheme.

In light of the extraordinary State intervention and so as to incentivise cost control it was originally designed on the basis of a 90% grant scheme.



Prior to its introduction, in order to ensure consistency in the assessment, testing and categorisation of defective concrete blocks, the NSAI was tasked with putting in place a protocol to guide engineers, geologists and laboratories in assessing, testing and categorising damage.

Protocol IS:465, was published in November, 2018, and gives guidance on the choice of the appropriate remedial works option. In addition, to assist homeowners in sourcing appropriate engineers, Engineers Ireland (EI) was tasked with putting in place a panel of engineers, trained in the application of the IS:465 protocol.

The DCB Scheme funds 5 different remediation options set out in IS:465 as follows;

Table 1: Grant Amount Payable per Remedial Option ⁴			
Remedial Option	Remedial Option Description	Maximum Grant Payable ^{1,} (90% of Max Eligible Expenditure)	
Option 1	Demolish entire dwelling to foundation level and rebuild.	€247,500	
Option 2	Demolish and rebuild external walls (both outer and inner leafs) down to foundation on a phased basis and re-render.	€198,000	
Option 3	Demolish and rebuild external walls (both outer and internal leafs) down to top of rising wall on a phased basis and re-render.	€189,000	
Option 4	Demolish and rebuild external	€67,500	

⁴ As per the Scheme as originally formulated – now updated and enhanced.



	walls (outer leaf only) down to top of rising wall on a phased basis and re-render.			
Option 5	Demolish and rebuild outer leaf of affected walls only and re-render.	€49,500		
NOTE:				
1. All cos	All costs are inclusive of VAT.			

Challenges with Scheme Administration

Under the current operating terms of the Scheme, homeowners engage an IS:465 registered engineer to assess their home for eligibility and to determine the appropriate minimum feasible remediation option. The local authority are then required to assess the submission and check that the engineers Report has been prepared in accordance with I.S. 465 and the remedial option recommended represents the minimum feasible remedial works for the dwelling. If the local authority is satisfied confirmation is issued (Stage 1 approval). The homeowners engineer then prepares a remedial works plan and arranges for contractor quotations. The remedial works plan and the contractors cost plan are then assessed by the relevant local authority and all ineligible works and costs which are not allowable are excluded. The homeowner is then notified by the local authority of their approval and the grant amount. They can thereafter commence remediation works. (Stage 2 approval).

For more information on the historic scheme, see <u>Overview of Defective</u> Concrete Blocks Scheme.



SCSI 'Guide to House Rebuilding Costs for Insurance Purposes' – key points of divergence

The SCSI publish an annual 'Guide to House Rebuilding Costs for Insurance Purposes' which is used by homeowners as a guide to help them determine the appropriate level of insurance cover for the rebuild of their homes.

It is the view of the Department that the SCSI guide is fair and reasonable and helpful in framing rebuild construction costs. The published 2021 SCSI guide estimated that the appropriate rebuild cost for the North West is an average €138 psf. This covers the cost of rebuilding a home on new foundations to 2021 building standards.

It is important to acknowledge however that the SCSI guide is not an exact match for DCB grant calculation purposes.

The guide is based on typical speculatively built, estate type house across 6 house types ranging in size from 753 – 1,571 sq.ft. with average rebuild costs psf ranging from €145 to €134.

Many of the properties eligible under the DCB Scheme are likely to be one off houses in rural settings.

The SCSI guide relates to costs for the re-build of homes on new foundations to current building standards.

Foundations do not require replacement in DCB impacted homes and the costs adopted for the grant scheme must reflect this and also that homes are grant aided for replacement on a like for like basis.

Under DCB, homeowners are free to rebuild homes and upgrade to current building standards but the marginal cost is not reflected in the grant



available and must be borne by homeowners. SEAI grants are however available to homeowners to help defray such costs, where incurred.

The economies of scale associated with housebuilding, which are evident even across a small range of house types and sizes within the SCSI guide, are also important for The Department in the context of setting fair and reasonable rates grant rates for homeowners.

Subject to the key points of divergence set out above, the actual estimated rebuild costs within the 2021 SCSI guide for the 6 house types considered are as follows;

House Type	Sq. Mts.	Sq. Ft.	Advice on Rebuild Cost	Avg Cost PSF
2 Bed Terrace	70	753.47	€109,550	€145.39
3 Bed Terrace	95	1022.57	€140,410	€137.31
3 Bed Semi-Detached	95	1022.57	€141,645	€138.52
4 Bed Semi-Detached	118	1270.14	€174,404	€137.31
4 Bed Bungalow	118	1270.14	€175,938	€138.52
4 Bed Bungalow	146	1571.52	€210,386	€133.87
Average Cost psf				€138.49

Indicative Cost Per Square Foot (psf) Set by the Department for Option 1

For the purposes of costing the revised DCB scheme the Departments DCB team, in collaboration with internal technical advisors (QS), developed a costing methodology based on a cost psf, which was informed by first-hand experience of costs through the Department's extensive social housing build programme, a



review of remediation cost plans received from homeowners which are Stage 2 approved under the scheme, and the SCSI rebuild guide.

The indicative cost psf approved by Government under the current proposed methodology allows for grants to homeowners based on;

- a fixed sum of €20,000 for alternative accommodation and storage costs,
- €145psf for the first 1,000 sq. ft.,
- €110psf for the next 1,000 sq. ft. and
- €100psf thereafter.

The table below sets out what this means for different home sizes in terms of cost psf and the maximum grant available under an Option 1 remediation (demolition & rebuild on existing foundations);

House Size in	Accommodation	Average Rebuild	Max Homeowner
Sq. Ft	& Storage Costs	Costs Allowable	Grant
		PSF	
800	20,000	€145	€136,000
1,200	20,000	€140	€187,000



1,600	20,000	€132	€231,000
2,000	20,000	€128	€275,000
2,500	20,000	€122	€325,000
3,000	20,000	€118	€375,000
3,450	20,000	€116	€420,000

The sliding scale effect in the grant calculation methodology is apparent. This is an important issue as it protects homeowners with smaller homes where there are few economies of scale. It also deals appropriately with the economies of scale which owners of large homes will experience. A grant based on a flat rate cost psf would not do this as it will disproportionally benefit the owners of larger homes and disadvantage owners with smaller/average sized homes.

Using a grant calculation methodology based on a cost per sq. ft. will:

- significantly streamline the grant application process
- give homeowners certainty on their grant level before commencing the design of remediation works
- remove significant potential disagreement between homeowners and local authorities on contractor quotations and eligible and allowable costs



- embed a stronger level of cost certainty within the overall scheme
- encourage homeowners to seek value and, in keeping with climate action objectives and the circular economy, encourage homeowners to reduce and reuse where appropriate and feasible
- allow for construction cost changes to be kept under review, in consultation with SCSI, and incorporated seamlessly into the DCB scheme. The terms of reference encompass consideration and advice on this issue

For more information on the changes to the Defective Concrete Blocks Scheme, see **Defective Concrete Blocks Grant Scheme: Your Questions Answered.**