

Surface Development Guideline 5 – Active mining areas – Moderate predicted subsidence impact

Requirements, information and guidance for property owners
likely to be undermined by future mine workings

SUBSIDENCE
ADVISORY NSW

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1. Introduction

Subsidence Advisory NSW (SA NSW) is the NSW Government agency responsible for regulating and administering the mine subsidence compensation system in NSW.

SA NSW has developed and applied surface development guidelines (Guidelines) in accordance with the *Coal Mine Subsidence Compensation Act 2017*, to support, inform, and guide prospective home builders, property developers, local councils and other stakeholders to mitigate or eliminate the damage to surface structures from mine subsidence within proclaimed mine subsidence districts.

In areas within active mining leases, the development guidelines are designed to effectively balance the interests of property owners and coal mine proprietors, providing mitigation measures against subsidence damage without imposing unreasonable costs and restrictions on the landowner or unreasonably sterilising coal resources.

2. Surface Development Guidelines

One of eight guidelines has been applied to each property within a mine subsidence district. The guideline applied depends on the subsidence risks at each property as detailed below:

Guideline 1.	Non-active mine workings at risk of pothole subsidence
Guideline 2.	Non-active mine workings possible subsidence risk
Guideline 3.	Non-active mine workings remote subsidence risk
Guideline 4.	Active mining areas – high predicted subsidence impact
Guideline 5.	Active mining areas – moderate predicted subsidence impact
Guideline 6.	Active mining areas – minimal predicted subsidence impact
Guideline 7.	On Application
Guideline 8.	No Restrictions

3. Objective of Guideline 5

This guideline explains what home builders and property developers must do in relation to obtaining approval for their development under the:

- *Coal Mine Subsidence Compensation Act 2017* (the Act)
- *Coal Mine Subsidence Compensation Regulation 2017* (the Regulation)

Compliance with this guideline is a requirement for person planning to develop property within a mine subsidence district that has been assigned **Guideline 5**.

The purpose of **Guideline 5** is to:

- prevent or minimise damage to a residential building during mining. The most common damage to occur during mining is brickwork cracking due to inadequate articulation of the brickwork, refer AS4773, and issues with services due to lack of flexibility and adequate falls, refer AS3500.
- ensure the residential building remains safe to persons inhabiting the residence.

- ensure that when residential construction in future mining areas occurs, compliance with the Act and Regulation is as simple and inexpensive for the home builder as practicable.

4. Areas where Guideline 5 applies

Areas subject to **Guideline 5** are identified on the NSW Planning Portal at www.planningportal.nsw.gov.au/find-a-property.

Guideline 5 applies to properties within mine subsidence districts assessed by SA NSW as likely to be undermined in the future with moderate subsidence-induced ground movements up to and including:

- Maximum Horizontal Ground Strain: 3mm/m tensile or compressive.
- Maximum Tilt: 7mm/m.
- Minimum Radius of Curvature: 5km (hogging and sagging).

5. Allowable residential construction

Guideline 5 applies to applications for a single residential building that (a) is not a dual occupancy or unit development and (b) conforms with the following description. Commercial buildings or applications for more than one residential building will be assessed on merit.

The following residential construction is allowable on properties subject to **Guideline 5**:

Single-storey or two-storey, clad frame or articulated brick veneer residential buildings, erected on reinforced concrete footings/slabs, designed and constructed to comply with AS 2870 for a minimum Class H2 site ignoring Class “P” for a Mine Subsidence site.

These buildings are limited to a maximum length of 24 metres and a maximum footprint of 400m²

The buildings are to be designed and constructed in accordance with the current editions of AS1684, AS 2870, AS3600, AS3700, AS4773, the Building Code of Australia, any other relevant applicable Australian Standards and good engineering practice. Masonry is to be articulated, in accordance with the current editions of Australian Standards AS3700 and AS4773.

The gradients on wet area floors, roof gutters and drainage shall be increased to ensure that they remain serviceable when subjected to 7mm/m tilts.

Flexible joints in pipes shall be designed in accordance with AS3500 to minimum H2 site classification specifications to accommodate curvature in any plane, coupled with tensile or compressive strain.

Branches, bends and valve stems shall be protected by flexible wrapping or shrouds to prevent shearing of the pipes as ground movement occurs. Flexible joints shall be provided where pipes are connected to chambers or gullies.

No internal or integrated retaining walls are permitted.

Note: Any development within a flood prone area will require assessment by SA NSW to determine the required floor level taking future subsidence into account.

6. Who assesses whether development complies with Guideline 5

The relevant council or an accredited certifier as defined in the *Environmental Planning and Assessment Act 1979* assesses whether development complies with Guideline 5.

7. Proposed developments that do not comply with the guideline

Proposed improvements that do not comply with the guideline for the property, including any development within a flood prone area, must be assessed by SA NSW risk engineers on merit. This includes higher density residential development or commercial buildings.

Depending on the type of construction and nature of the mine workings, SA NSW may require specific engineering design measures to be applied to the improvement, further geotechnical investigation to better understand the subsidence risk, or stabilisation of the mine workings.

An application for approval must be lodged with SA NSW in accordance with Section 22 of the Act.

8. Certification requirements

Following construction, a certifier must be engaged to certify that an improvement has been constructed in accordance with **Guideline 5**. A copy of this certification must be provided to SA NSW.

9. Other allowable additions and improvements

Refer to SA NSW's deemed approval list for other allowable additions and improvements on properties subject to **Guideline 5**.

10. How this guideline was developed

SA NSW's development guidelines were developed by SA NSW in consultation with an expert reference group comprising of structural engineers, mining experts and key mining and development industry stakeholders.

11. Disclaimer

Please note SA NSW's surface development guidelines are subject to change.