

Surface Development Guideline 4 – Active mining areas High 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 risk of 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 is assigned 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 4

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 persons planning to develop property within a mine subsidence district that has been assigned **Guideline 4**.

The purpose of this guideline is to:

- prevent or minimise damage to a residential building during mining
- 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 this guideline applies

Areas subject to **Guideline 4** are identified on the NSW Planning Portal at www.planningportal.nsw.gov.au/find-a-property.

Guideline 4 applies to properties within mine subsidence districts assessed by SA NSW as likely to be undermined in the future with subsidence-induced ground movements up to and including:

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

5. Allowable residential construction

Guideline 4 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 by SA NSW on merit.

The following residential construction is permitted within areas subject to **Guideline 4**:

Single storey clad frame residential buildings, erected on reinforced concrete strip footings or waffle raft slab to minimum H2 site classification to AS2870. Site classification "P" for mine subsidence site is to be ignored for these structures. Maximum height of foundation brickwork 1.5m.

These improvements are limited to a maximum length of 18 metres and a maximum footprint of 250 square metres.

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.

The gradients on wet area floors and roof gutters shall be increased to ensure that they remain serviceable as mining occurs.

All services and external works shall be designed and constructed to accommodate;

- Maximum Horizontal Ground Strain: 5mm/m tensile or compressive.
- Maximum Tilt: 10mm/m (this is to ensure structure remains functional should tilts exceed 7mm/m).
- Minimum Radius of Curvature: 3km.

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.

6. Who can assess development applications on Guideline 4 properties

SA NSW assesses all applications for development (both complying and non-complying) on properties subject to **Guideline 4**.

SA NSW generally processes development applications that comply with this guideline within five business days.

7. Proposed developments that do not comply with the guideline

Proposed improvements that do not comply with the guideline for the property, including higher density residential development and commercial buildings, must be assessed by SA NSW risk engineers on merit.

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

Building structures not covered by this guideline and in-ground concrete pools, garages with masonry walls and retaining walls, of masonry or concrete construction, greater than 1.0 metre in height, will require engineering design and shall be designed and constructed to accommodate:

- Maximum Horizontal Ground Strain: 5mm/m tensile or compressive.
- Maximum Tilt: 10mm/m (this is to ensure improvements remain functional should tilts exceed 7mm/m).
- Minimum Radius of Curvature: 3km (hogging and sagging).

8. Other allowable additions and improvements

Refer to SA NSW's deemed approval list for other allowable additions and improvements on properties subject to **Guideline 4**.

9. Certification requirements

Following construction, a certifier must be engaged to certify that an improvement has been constructed in accordance with **Guideline 4**. A copy of this certification must be provided to SA NSW.

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