

QUALITY ALERT

Created By: Sam James (Quality Manager)

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Business:	MIDA Civil Engineering Ltd		ALERT												
Title:	Manhole Covers and Ironwork Loadings	Reference No:	QA15												
Issued By:	Sam James	Issue Date:	07/09/23												
Type of Alert:	Quality & Compliance														
Subject:	Correct Understanding of Manhole cover gradings and loads and what to order														
Operatives Affected:	Groundworkers	<table><tr><th colspan="2">TABLE SHOWING PRIVATE MANHOLE/INSPECTION CHAMBER COVER GRADES AND AREAS OF USE</th></tr><tr><th>COVER GRADE TO BS EN: 124</th><th>LOCATION</th></tr><tr><td>D400</td><td>FOR USE IN INDUSTRIAL ROADS AND PARKING AREAS ACCESSIBLE TO ALL TYPES OF ROAD VEHICLES INCLUDING HGV'S.</td></tr><tr><td>C250*</td><td>FOR USE IN PRIVATE ROADS OR PARKING AREAS eg. CAR PARKS AND MINOR PRIVATE ROADS ACCESSIBLE TO REFUSE VEHICLES, FIRE APPLIANCES ETC WITH POSSIBLE OCCASIONAL HGV USE.</td></tr><tr><td>B125</td><td>FOR USE IN FOOTWAYS, PEDESTRIAN AREAS, DRIVEWAYS AND CAR PARKS ACCESSIBLE BY LIGHT VEHICLES ONLY.</td></tr><tr><td>A15</td><td>FOR USE IN AREAS WHICH CAN ONLY BE USED BY PEDESTRIANS AND PEDAL CYCLISTS</td></tr></table> * D400 MAY BE USED IN LIEU OF C250 IF PREFERRED.		TABLE SHOWING PRIVATE MANHOLE/INSPECTION CHAMBER COVER GRADES AND AREAS OF USE		COVER GRADE TO BS EN: 124	LOCATION	D400	FOR USE IN INDUSTRIAL ROADS AND PARKING AREAS ACCESSIBLE TO ALL TYPES OF ROAD VEHICLES INCLUDING HGV'S.	C250*	FOR USE IN PRIVATE ROADS OR PARKING AREAS eg. CAR PARKS AND MINOR PRIVATE ROADS ACCESSIBLE TO REFUSE VEHICLES, FIRE APPLIANCES ETC WITH POSSIBLE OCCASIONAL HGV USE.	B125	FOR USE IN FOOTWAYS, PEDESTRIAN AREAS, DRIVEWAYS AND CAR PARKS ACCESSIBLE BY LIGHT VEHICLES ONLY.	A15	FOR USE IN AREAS WHICH CAN ONLY BE USED BY PEDESTRIANS AND PEDAL CYCLISTS
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Details:	Understanding the differences in loadings required when ordering manhole covers and gully grates														
Action Required:	Check the drawing detail and where the cover is to be used, and by what vehicles. Aco channels are the same. We should not be using A15 grading - unless a vehicle cannot cross them. Similarly, with recessed block paving covers - think about the loads that will be travelling over them such as; Bin lorries and potentially forklifts during the construction period.														
Further Information:	NHBC Standards 5.3 Extract to right of classes	<table><tr><th colspan="2">Table 5: Type of covering and grid required for inspection and manhole covers and frames</th></tr><tr><td>Group 1</td><td>Areas which can only be used by pedestrians and cyclists.</td></tr><tr><td>Group 2</td><td>Footways, pedestrian areas and comparable areas, car parks or car parking decks.</td></tr><tr><td>Group 3</td><td>For gully tops installed in the area of kerbside channels of roads which when measured from the kerb edge, extend a maximum of 0.5m into the carriageway and a maximum of 0.2m into the footway.</td></tr><tr><td>Group 4</td><td>Carriageways of roads, including pedestrian streets, hard shoulders and parking areas, and suitable for all types of road vehicles.</td></tr></table>		Table 5: Type of covering and grid required for inspection and manhole covers and frames		Group 1	Areas which can only be used by pedestrians and cyclists.	Group 2	Footways, pedestrian areas and comparable areas, car parks or car parking decks.	Group 3	For gully tops installed in the area of kerbside channels of roads which when measured from the kerb edge, extend a maximum of 0.5m into the carriageway and a maximum of 0.2m into the footway.	Group 4	Carriageways of roads, including pedestrian streets, hard shoulders and parking areas, and suitable for all types of road vehicles.		
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Method for Communication:	Briefing by Site Manager to operatives via TBT Alert to be put up in site office and Canteen														

Group 1	For use in pedestrian areas where vehicles have no access	A15	15kN (1.5 tonnes)
Group 2	For use in car parks & pedestrian areas where infrequent vehicle access is likely (incl. driveways)	B125	125kN (12.5 tonnes)
Group 3	For access covers & gully gratings in areas of slow moving, heavy traffic; also for gully gratings in certain carriageway areas (see full definition above)	C250	250kN (25 tonnes)
Group 4	For use in carriageways of roads, hard shoulders and parking areas	D400	400kN (40 tonnes)
Group 5	For use in areas where high wheel loads are present	E600	600kN (60 tonnes)
Group 6	For use in areas where extremely high wheel loads are present	F900	900kN (90 tonnes)