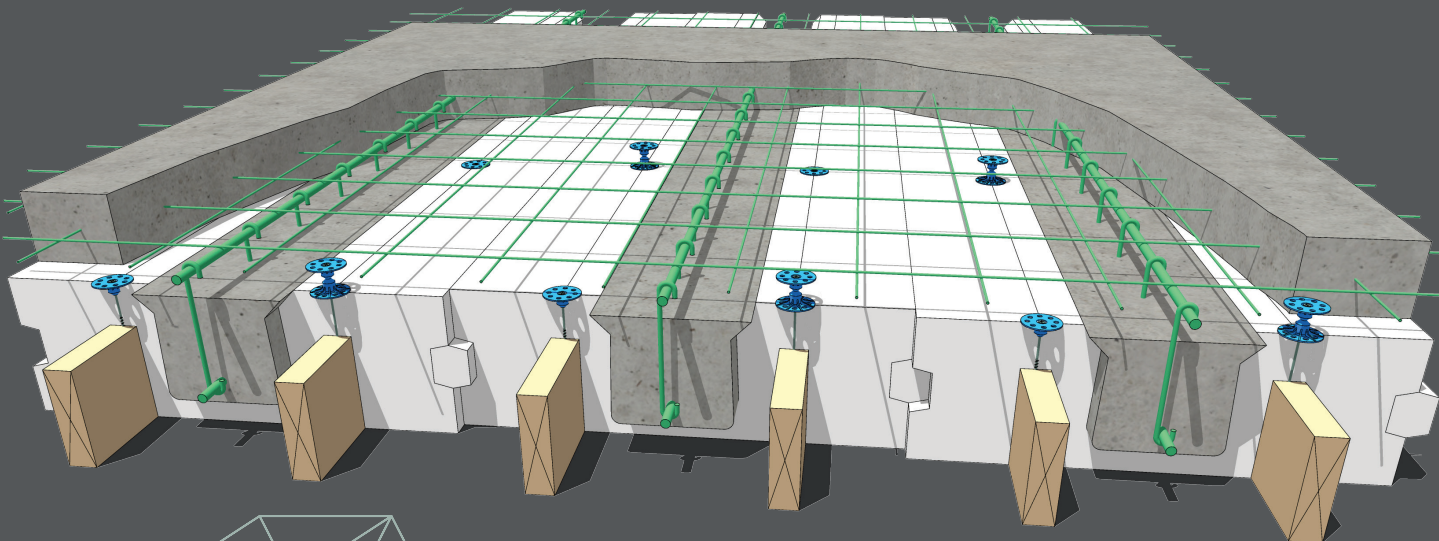


Amdeck Eco Design Guide

PROTECTIVE FOAM SOLUTIONS

INNOVATIVE INSULATION CONSTRUCTION
SOLUTIONS FOR ENERGY EFFICIENT AND
COMFORTABLE BUILDINGS



7 SEPTEMBER 2023



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Introduction

This document is provided for informational purposes and is only to be used as basic guideline for reinforcement design by a licensed design professional. The design and construction of all work shall conform to the local building code and any additional local regulations and bylaws including occupational health and safety acts. The final specification and application of this design guide shall be determined by a licensed engineer or qualified design professional.

Using this Guide

Select the desired span and thickness of concrete slab. Different version of Amdeck Eco will require different configurations of reinforcement. Once those three items are selected, choose the most accurate live load for the use case (e.g. garage, typical residential, party room). The typical values provided below are for reference only and if in doubt, consult an engineering professional.

- Live load of 40 psf (1.9 kPa) - Bedrooms, Living spaces in apartments, hotels, bathrooms,
- Live load of 50 psf (2.4 kPa) - Car garages, classrooms,
- Live load of 80 psf (3.8 kPa) - Billiard and pool rooms, equipment rooms,
- Live load of 100 psf (4.8 kPa) - Assembly areas, non-residential kitchens, retail and storage areas,

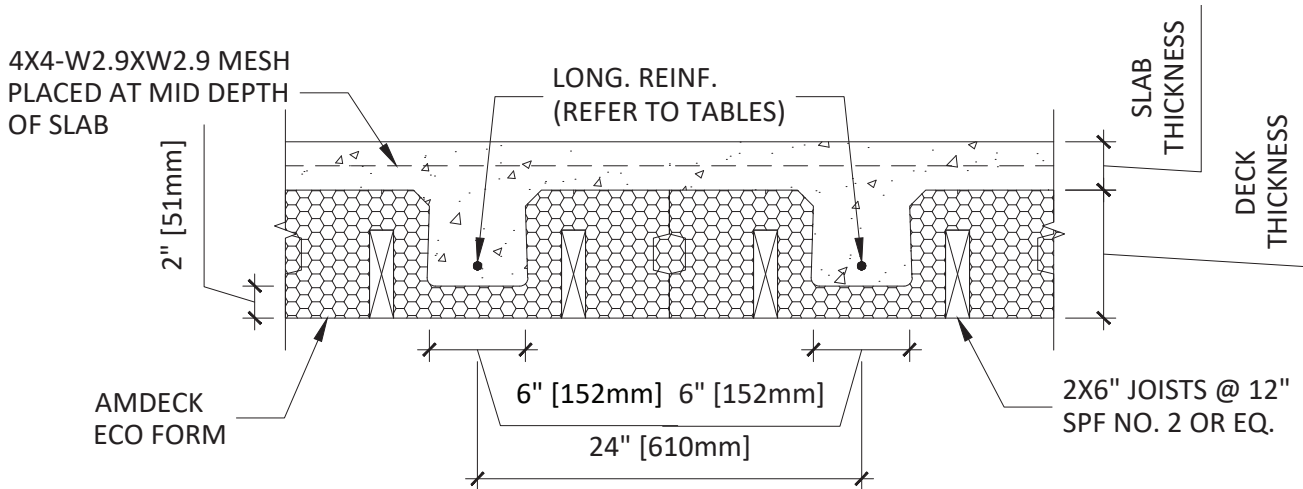


Diagram 1 - Single bottom bar reinforcement

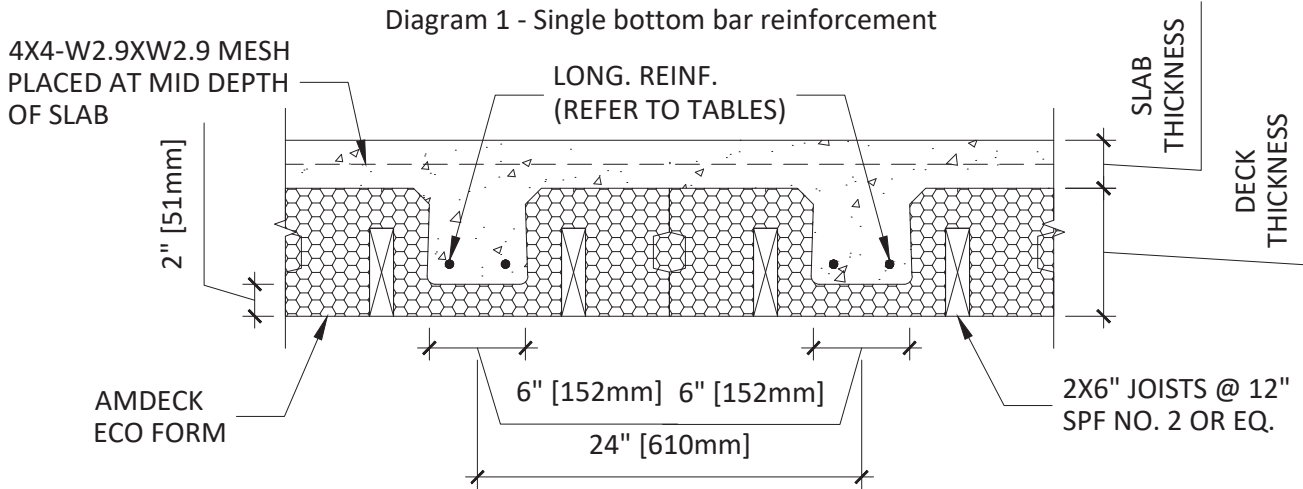


Diagram 2 - Double bottom bar reinforcement



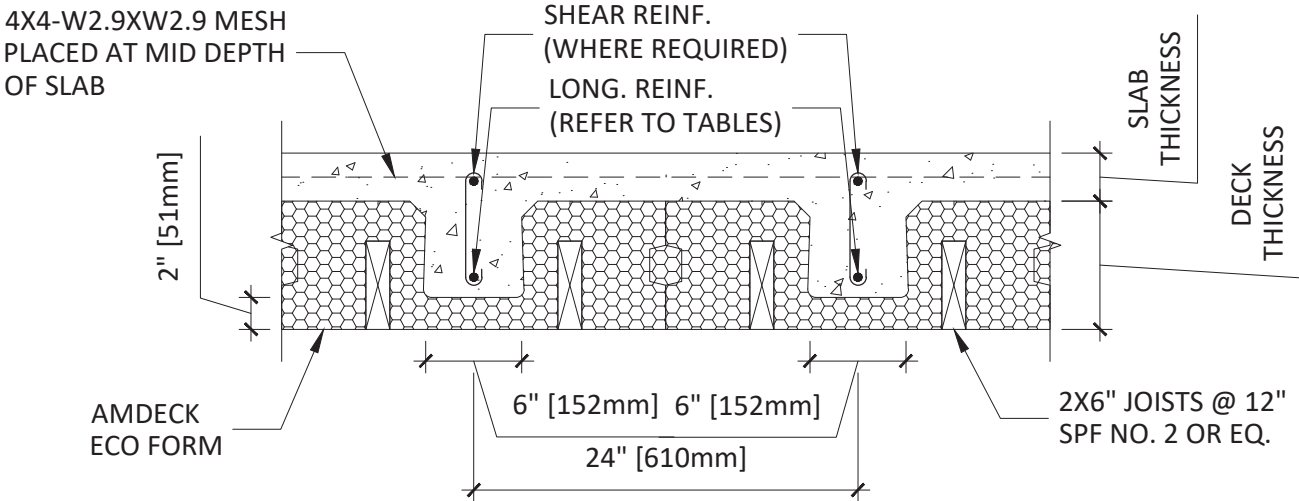


Diagram 3 - Single bar reinforcement with shear

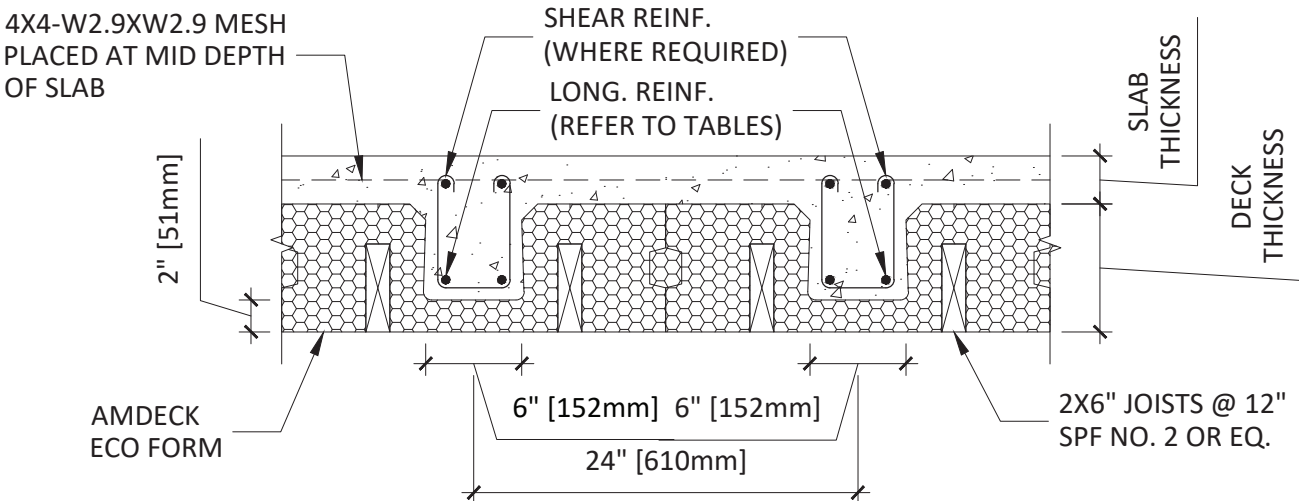


Diagram 4 - Double bar reinforcement with shear

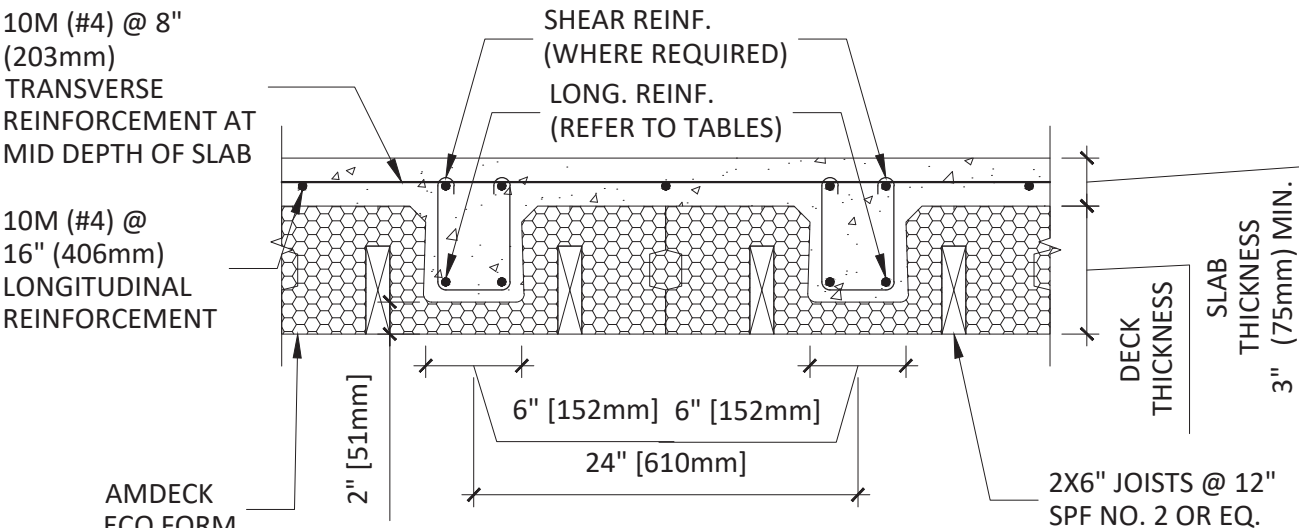
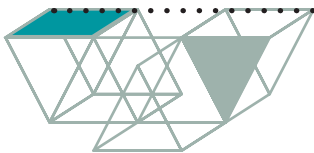


Diagram 5 - Typical car garage double bar reinforcement



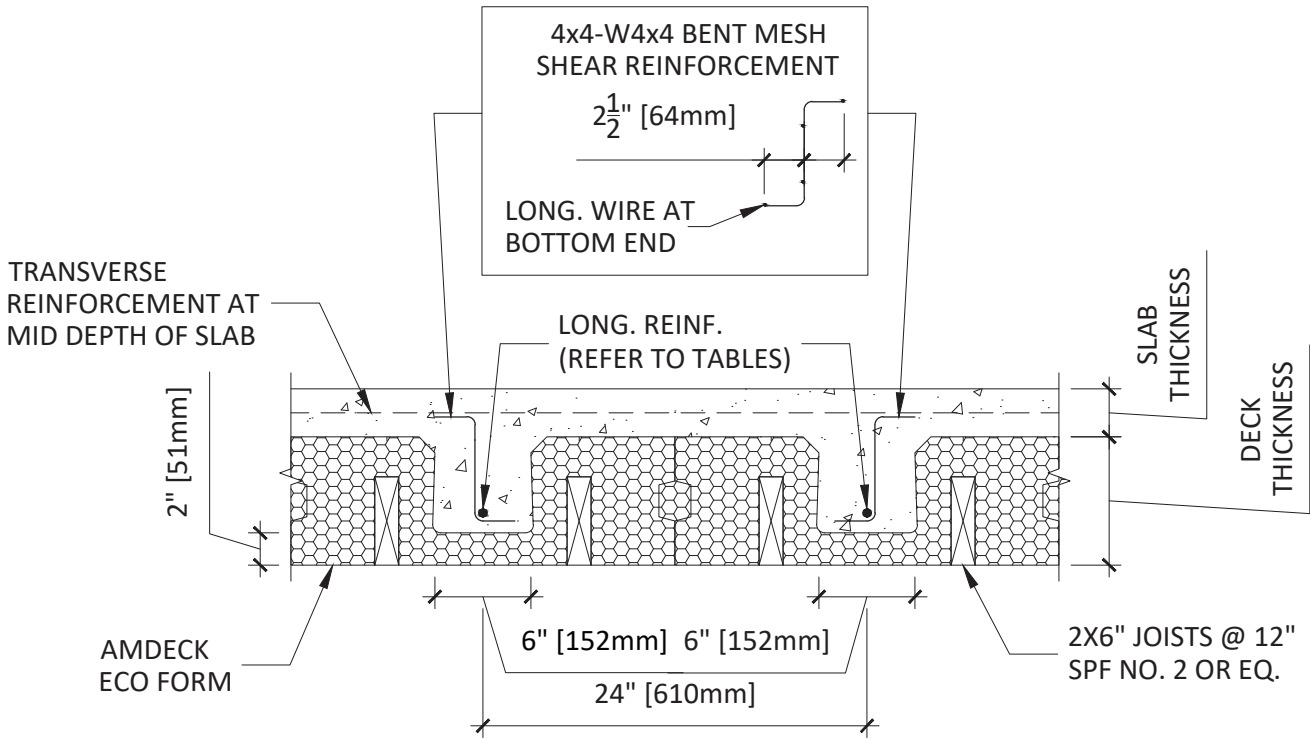


Diagram 6 - Mesh Shear Reinforcement

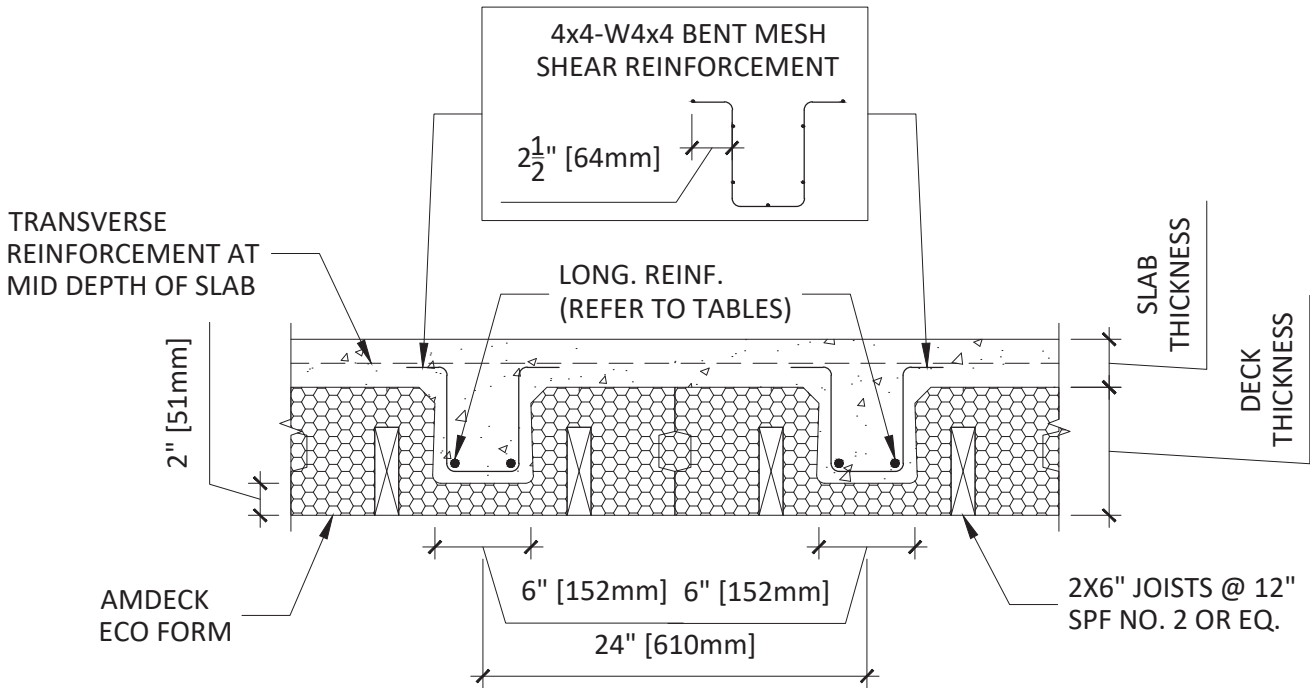


Diagram 7 - Double Bar with Mesh Shear Reinforcement



Table 1 - 8" (203mm) Amdeck Eco Canadian Minimum Required Reinforcement

Slab Thickness in (mm)																		
2 (51)				2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
psf (kPa)	Self Weight psf (kPa)																	
	48 (2.29)			54 (2.58)			60 (2.87)			67 (3.20)			73 (3.49)			79 (3.78)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤8 ≤(2.44)	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M
9 (2.74)	1-10M	1-15M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-10M
10 (3.05)	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M
11 (3.35)	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M
12 (3.66)	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M
13 (3.96)	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M
14 (4.27)	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M
15 (4.57)	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements . The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

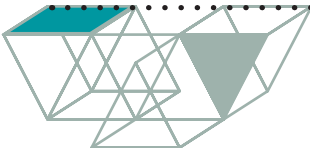


Table 1 - 8" (203mm) Amdeck Eco Canadian Minimum Required Reinforcement Cont.

Slab Thickness in (mm)																								
2 (51)				2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)								
psf (kPa)	Self Weight psf (kPa)																							
	48 (2.29)			54 (2.58)			60 (2.87)			67 (3.20)			73 (3.49)			79 (3.78)								
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)						
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)						
Span ft (m)	Minimum Required Bottom Reinforcement																							
16 (4.88)	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	1-20M	2-15M	1-15M	1-20M	2-15M						
17 (5.18)	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M						
18 (5.49)	1-20M	2-20M		1-20M	2-20M		1-20M	2-20M		1-20M	2-15M		2-20M	1-20M	2-15M		2-20M	1-20M	2-15M		2-20M			
19 (5.79)	2-15M			2-15M			2-20M		2-20M	2-15M			2-20M		2-20M	1-20M	2-15M		2-20M					
20 (6.10)	2-15M			2-15M			2-15M			2-20M		2-20M	2-15M			2-20M		2-20M	2-15M			2-20M		2-20M
21 (6.40)				2-15M			2-15M			2-15M			2-20M		2-20M	2-15M			2-20M		2-20M			
22 (6.71)							2-20M			2-20M			2-15M			2-20M		2-25M ⁹	2-15M			2-20M		2-25M ⁹
23 (7.01)										2-20M			2-20M			2-25M ⁹		2-20M	2-25M ⁹		2-25M ⁹			

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

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⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

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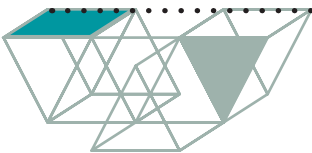


Table 2 - 8" (203mm) Amdeck Eco US Minimum Required Reinforcement

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	48 (2.29)			54 (2.58)			60 (2.87)			67 (3.20)			73 (3.49)			79 (3.78)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤9 (≤2.74)	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4
10 (3.05)	1-#4	1-#4	1-#5	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4
11 (3.35)	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5
12 (3.66)	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
13 (3.96)	1-#4	1-#5	1-#6	1-#4	1-#5	1-#6	1-#4	1-#5	1-#6	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
14 (4.27)	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6
15 (4.57)	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6
16 (4.88)	1-#5	2-#5	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

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¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

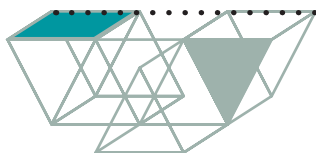


Table 2 - 8" (203mm) Amdeck Eco US Minimum Required Reinforcement Cont.

Slab Thickness in (mm)																		
2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)			
psf (kPa)	Self Weight psf (kPa)																	
	48 (2.29)			54 (2.58)			60 (2.87)			67 (3.20)			73 (3.49)			79 (3.78)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
17 (5.18)	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5
18 (5.49)	1-#6	2-#5		1-#6	2-#5	2-#6	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5
19 (5.79)	1-#6			1-#6	2-#5		1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6
20 (6.10)	2-#5			2-#5			2-#5	2-#6		2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#5	2-#6
21 (6.40)				2-#5			2-#5			2-#5	2-#6		2-#5	2-#6	2-#6	2-#5	2-#6	2-#6
22 (6.71)							2-#5			2-#5			2-#5	2-#6	2-#6	2-#5	2-#6	2-#6
23 (7.01)										2-#5			2-#5	2-#6		2-#5	2-#6	2-#7 ⁹

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

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⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.





DESIGN GUIDE

AMDECK ECO

Table 3 - 10" (254mm) Amdeck Eco Canadian Minimum Required Reinforcement

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	54 (2.58)			60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤9 ≤(2.74)	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M	1-10M
10 (3.05)	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M	1-10M	1-10M	1-15M
11 (3.35)	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M
12 (3.66)	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M	1-10M	1-15M	1-15M
13 (3.96)	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M
14 (4.27)	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M
15 (4.57)	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M
16 (4.88)	1-15M	1-20M	2-15M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M
17 (5.18)	1-15M	2-15M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements . The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

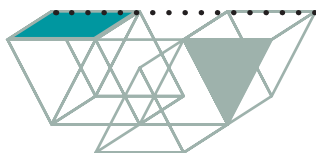


Table 3 - 10" (254mm) Amdeck Eco Canadian Minimum Required Reinforcement Cont.

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	54 (2.58)			60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
18 (5.49)	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M
19 (5.79)	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M
20 (6.10)	1-20M	2-20M	2-20M	1-20M	2-20M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M
21 (6.40)	2-15M	2-20M		2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
22 (6.71)	2-15M			2-15M	2-20M		2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
23 (7.01)	2-15M			2-15M			2-15M	2-20M		2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
24 (7.31)	2-20M			2-20M			2-20M			2-20M	2-20M		2-20M	2-20M	2-25M ⁹	2-15M	2-20M	2-25M ⁹
25 (7.62)				2-20M			2-20M			2-20M			2-20M	2-25M ⁹		2-20M	2-25M ⁹	2-25M ⁹

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

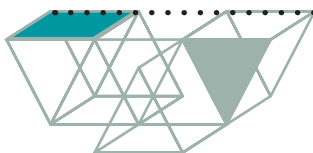


Table 4 - 10" (254mm) Amdeck Eco US Minimum Required Reinforcement

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	54 (2.58)			60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤11 ≤(3.35)	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4
12 (3.66)	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5
13 (3.96)	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
14 (4.27)	1-#4	1-#5	1-#6	1-#4	1-#5	1-#6	1-#4	1-#5	1-#6	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
15 (4.57)	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6
16 (4.88)	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6
17 (5.18)	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6
18 (5.49)	1-#5	2-#5	2-#5	1-#5	2-#5	2-#5	1-#5	2-#5	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.



Table 4 - 10" (254mm) Amdeck Eco US Minimum Required Reinforcement Cont.

Slab Thickness in (mm)																		
psf (kPa)	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	54 (2.58)			60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
19 (5.79)	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5
20 (6.10)	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5
21 (6.40)	1-#6	2-#6		1-#6	2-#6		1-#6	2-#6		1-#6	2-#5 2-#6		1-#6	2-#5 2-#6		1-#6	2-#5 2-#6	
22 (6.71)	2-#5			2-#5 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6		
23 (7.01)	2-#5			2-#5			2-#5 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6		
24 (7.31)	2-#5			2-#5			2-#5			2-#5 2-#6			2-#5 2-#6 2-#6			2-#5 2-#6 2-#6		
25 (7.62)				2-#5			2-#5			2-#5			2-#5 2-#6			2-#5 2-#6 2-#7 ⁹		

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional.

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.



Table 5 - 12" (305mm) Amdeck Eco Canadian Minimum Required Reinforcement

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)			91 (4.35)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤14 ≤(4.27)	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M	1-15M
15 (4.57)	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M	1-15M	1-15M	1-20M
16 (4.88)	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M
17 (5.18)	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M	1-15M	1-20M	1-20M
18 (5.49)	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M	1-15M	1-20M	2-15M
19 (5.79)	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M
20 (6.10)	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M	1-20M	2-15M	2-15M
21 (6.40)	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M	1-20M	2-15M	2-20M
22 (6.71)	1-20M	2-20M	2-20M	1-20M	2-20M	2-20M	1-20M	2-20M	2-20M	1-20M	2-20M	2-20M	1-20M	2-20M	2-20M	1-20M	2-15M	2-20M

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.



Table 5 - 12" (305mm) Amdeck Eco Canadian Minimum Required Reinforcement Cont.

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)			91 (4.35)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
23 (7.01)	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
24 (7.31)	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
25 (7.62)	2-15M	2-20M		2-15M	2-20M	2-25M ⁹	2-15M	2-20M	2-25M ⁹	2-15M	2-20M	2-25M ⁹	2-15M	2-20M	2-20M	2-15M	2-20M	2-20M
26 (3.66)	2-20M			2-20M	2-20M		2-20M	2-20M		2-20M	2-20M	2-25M ⁹	2-20M	2-20M	2-25M ⁹	2-20M	2-20M	2-25M ⁹
27 (3.96)	2-20M			2-20M			2-20M			2-20M	2-25M ⁹		2-20M	2-25M ⁹	2-25M ⁹	2-20M	2-25M ⁹	2-25M ⁹
28 (4.27)				2-20M			2-20M			2-20M	2-25M ⁹		2-20M	2-25M ⁹		2-20M	2-25M ⁹	2-25M ⁹
29 (8.84)							2-20M			2-20M			2-20M	2-25M ⁹		2-20M	2-25M ⁹	
30 (9.14)										2-20M			2-20M			2-20M	2-25M ⁹	

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional.

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

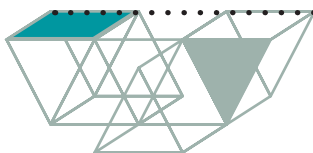


Table 6 - 12" (305mm) Amdeck Eco US Minimum Required Reinforcement

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)			91 (4.35)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
≤12 ≤(3.66)	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4	1-#4
13 (3.96)	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5	1-#4	1-#4	1-#5
14 (4.27)	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
15 (4.57)	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5	1-#4	1-#5	1-#5
16 (4.88)	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6	1-#5	1-#5	1-#6
17 (5.18)	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6
18 (5.49)	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6	1-#5	1-#6	1-#6
19 (5.79)	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5	1-#5	1-#6	2-#5
20 (6.10)	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5
21 (6.40)	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5	1-#6	2-#5	2-#5

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.



Table 6 - 12" (305mm) Amdeck Eco US Minimum Required Reinforcement Cont.

psf (kPa)	Slab Thickness in (mm)																	
	2 (51)			2-1/2 (63)			3 (76)			3-1/2 (89)			4 (102)			4-1/2 (114)		
	Self Weight psf (kPa)																	
	60 (2.87)			66 (3.16)			73 (3.49)			79 (3.78)			85 (4.06)			91 (4.35)		
Dead Load	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)	10 (0.4)	15 (0.7)	15 (0.7)
Live Load	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)	40 (1.9)	80 (3.8)	100 (4.8)
Span ft (m)	Minimum Required Bottom Reinforcement																	
22 (6.71)	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#5
23 (7.01)	1-#6	2-#6	2-#6	1-#6	2-#6	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6	1-#6	2-#5	2-#6
24 (7.31)	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6
25 (7.62)	2-#5	2-#6		2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6	2-#5	2-#6	2-#6
26 (3.66)	2-#5			2-#5	2-#6		2-#5	2-#6		2-#5	2-#6	2-#7 ⁹	2-#5	2-#6	2-#7 ⁹	2-#5	2-#6	2-#6
27 (3.96)	2-#5			2-#5			2-#5			2-#5	2-#6		2-#5	2-#6	2-#7 ⁹	2-#5	2-#6	2-#7 ⁹
28 (4.27)				2-#6			2-#6			2-#6	2-#7 ⁹		2-#6	2-#7 ⁹		2-#6	2-#7 ⁹	2-#7 ⁹
29 (8.84)							2-#6			2-#6			2-#6	2-#7 ⁹		2-#6	2-#7 ⁹	
30 (9.14)										2-#6			2-#6			2-#6	2-#7 ⁹	

¹ Materials used are concrete at 30 MPa and steel at 400 MPa. Dead and live loads are superimposed on the deck.

² Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

³ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 6 or stirrup reinforcement as determined by an engineering professional

⁴ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁵ CSA Standard A23.3 exposure conditions for concrete cover requirements . The above tabulated reinforcement requirements are for interior exposure.

⁶ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁷ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

⁸ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

⁹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹⁰ Refer to diagrams 1 to 4 and diagram 6 for reinforcement details.

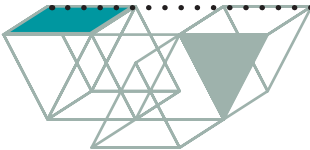


Table 7 - Two Car Garage Canadian Minimum Required Reinforcement

Slab Thick- ness in (mm)	Self Weight psf (kPa)	Minimum Required Bottom Reinforcement											Minimum Shear Reinforce- ment
		Span ft (m)											
		20 (6.10)	21 (6.40)	22 (6.71)	23 (7.01)	24 (7.31)	25 (7.62)	26 (3.66)	27 (8.23)	28 (8.53)	29 (8.84)	30 (9.14)	
8" (203mm) Amdeck Eco													
3 (76)	60 (2.87)	2-20M										W4 (Wire) @ 4" (102mm)	
3-1/2 (89)	67 (3.20)	2-20M	2-25M ¹¹									W4 (Wire) @ 4" (102mm)	
4 (102)	73 (3.49)	2-20M	2-25M ¹¹	2-25M ¹¹								W4 (Wire) @ 4" (102mm)	
4-1/2 (114)	79 (3.78)	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹						W4 (Wire) @ 4" (102mm)		
10" (254mm) Amdeck Eco													
3 (76)	66 (3.16)	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹					W4 (Wire) @ 5.5" (140mm)	
3-1/2 (89)	73 (3.49)	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹					W4 (Wire) @ 5.5" (140mm)	
4 (102)	79 (3.78)	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹				W4 (Wire) @ 5.5" (140mm)	
4-1/2 (114)	85 (4.06)	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹				W4 (Wire) @ 5.5" (140mm)
12" (305mm) Amdeck Eco													
3 (76)	73 (3.49)	2-15M	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹			W4 (Wire) @ 7" (178mm)
3-1/2 (89)	79 (3.78)	2-15M	2-20M	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹		W4 (Wire) @ 7" (178mm)
4 (102)	85 (4.06)	2-15M	2-15M	2-20M	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	W4 (Wire) @ 7" (178mm)
4-1/2 (114)	91 (4.35)	2-15M	2-15M	2-20M	2-20M	2-20M	2-20M	2-20M	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	2-25M ¹¹	W4 (Wire) @ 7" (178mm)

¹ Superimposed loads for all span configurations are 10 psf (0.48 kPa) for dead load and 50 psf (2.39 kPa) for live loads.

² Superimposed loads include: (i) a concentrated load of 4,000lb (1814kg) considered to be acting anywhere on the floor; or (ii) a 2,000lb (907kg) wheel load per tire.

³ Materials used are concrete at 30 MPa and steel at 400 MPa.

⁴ Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

⁵ Bolded text in table above indicate that shear reinforcement is required. Use mesh reinforcement as per Diagram 7 or stirrup reinforcement as determined by an engineering professional.

⁶ The above tabulated values are for single-span condition only. Continuous deck spans over supports will necessitate design of top reinforcement by an engineering professional.

⁷ CSA Standard A23.3 exposure conditions for concrete cover requirements. The above tabulated reinforcement requirements are for interior exposure.

⁸ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁹ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

¹⁰ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

¹¹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹² Refer to diagrams 5 and 7 for reinforcement details.



Table 8 - Two Car Garage US Minimum Required Reinforcement

Slab Thick-ness in (mm)	Self Weight psf (kPa)	Minimum Required Bottom Reinforcement												Minimum Shear Reinforce-ment
		Span ft (m)												
		20 (6.10)	21 (6.40)	22 (6.71)	23 (7.01)	24 (7.31)	25 (7.62)	26 (3.66)	27 (8.23)	28 (8.53)	29 (8.84)	30 (9.14)		
8" (203mm) Amdeck Eco														
3 (76)	60 (2.87)	2-#6											W4 (Wire) @ 4" (102mm)	
3-1/2 (89)	67 (3.20)	2-#6	2-#6										W4 (Wire) @ 4" (102mm)	
4 (102)	73 (3.49)	2-#6	2-#6	2-#7 ¹¹									W4 (Wire) @ 4" (102mm)	
4-1/2 (114)	79 (3.78)	2-#6	2-#6	2-#6	2-#7 ¹¹								W4 (Wire) @ 4" (102mm)	
10" (254mm) Amdeck Eco														
3 (76)	66 (3.16)	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹						W4 (Wire) @ 5" (127mm)	
3-1/2 (89)	73 (3.49)	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹						W4 (Wire) @ 5" (127mm)	
4 (102)	79 (3.78)	2-#5	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹					W4 (Wire) @ 5" (127mm)	
4-1/2 (114)	85 (4.06)	2-#5	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹	2-#7 ¹¹				W4 (Wire) @ 5" (127mm)	
12" (305mm) Amdeck Eco														
3 (76)	73 (3.49)	2-#5	2-#5	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹	2-#7 ¹¹			W4 (Wire) @ 6" (152mm)	
3-1/2 (89)	79 (3.78)	2-#5	2-#5	2-#6	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹	2-#7 ¹¹		W4 (Wire) @ 6" (152mm)	
4 (102)	85 (4.06)	2-#5	2-#5	2-#6	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹	2-#7 ⁹	2-#7 ¹¹	W4 (Wire) @ 6" (152mm)	
4-1/2 (114)	91 (4.35)	2-#5	2-#5	2-#6	2-#6	2-#6	2-#6	2-#6	2-#7 ¹¹	2-#7 ¹¹	2-#7 ¹¹	2-#7 ¹¹	W4 (Wire) @ 6" (152mm)	

¹ Superimposed loads for all span configurations are 10 psf (0.48 kPa) for dead load and 50 psf (2.39 kPa) for live loads.

² Superimposed loads include: (i) a concentrated load of 4,000lb (1814kg) considered to be acting anywhere on the floor; or (ii) a 2,000lb (907kg) wheel load per tire.

³ Materials used are concrete at 30 MPa and steel at 400 MPa.

⁴ Final reinforcement for deck spans shall be checked against site conditions and project design requirements and shall be the sole responsibility of the engineer of record.

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⁸ Where concentrated loads are present on the floor, the slab and rib strength capacity shall be checked by an engineering professional against such conditions.

⁹ Maximum unshored spans of Amdeck Eco forms shall not exceed 4' (1.2m) during construction.

¹⁰ The above tabulated spans shall be calculated based on the center-to-center spacing of supports, unless otherwise determined and detailed by an engineering professional.

¹¹ Spacing of bars and concrete cover requirements shall be checked by an engineering professional.

¹² Refer to diagrams 5 and 7 for reinforcement details.





Alleguard's Amdeck Eco is a high quality, innovative floor and roof system designed for low rise residential applications. Competitive pricing, extensive product distribution and excellent technical support are combined to provide our clients with a simplified approach to a superior finished product.

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