

GALEN FRP WIRE REINFORCEMENT

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Galen FRP* wire reinforcement is designed to replace traditional steel welded wire reinforcement used for various construction purposes. Galen mesh consists of FRP wires with high tensile strength and corrosion resistance. The mesh can be manufactured in rolls or sheets.

* - fiber reinforced polymer

Wire size	Width	Length	Spacing	Roll weight
	ft.	ft.	in.	lbs
FRP W 0.5 14 gauge	2'7"	50'	2x2	7,74
	2'7"	50'	4x4	3,87
	2'7"	100'	2x2	15,48
	2'7"	100'	4x4	7,74
FRP W 1.2 11 gauge	2'7"	50'	2x2	16,23
	2'7"	50'	4x4	8,12
	2'7"	100'	2x2	32,47
	2'7"	100'	4x4	16,23
	3'7"	50'	4x4	11,16
	3'7"	50'	8x8	5,58
	3'7"	100'	4x4	22,32
	3'7"	100'	8x8	11,16
	4'	50'	4x4	12,18
	4'	50'	8x8	6,09
	4'	100'	4x4	24,35
	4'	100'	8x8	12,18
FRP W 1.3 10 gauge	2'7"	50'	2x2	18,82
	2'7"	50'	4x4	9,41
	2'7"	100'	2x2	37,63
	2'7"	100'	4x4	18,82
	3'7"	50'	4x4	12,94
	3'7"	50'	8x8	6,47
	3'7"	100'	4x4	25,87
	3'7"	100'	8x8	12,94
	4'	50'	4x4	14,11
	4'	50'	8x8	7,06
	4'	100'	4x4	28,22
	4'	100'	8x8	14,11
	4'	150'	4x4	42,33
	4'	150'	8x8	21,17
	5'	50'	4x4	17,64
	5'	50'	8x8	8,82
	5'	100'	4x4	35,28
	5'	100'	8x8	17,64

Standard roll

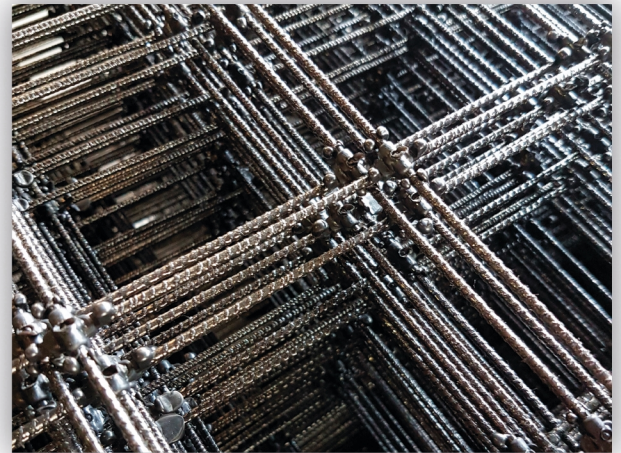


Galen FRP wire reinforcement is produced in length of 50' or 100'. The roll has no memory, which makes it easy to unroll.

FRP wire reinforcement cross sectional area table

Wire size	Dia.	Area	Area per foot of width for various spacings (sq. in.) center to center wire spacing		
	in.		sq. in.	2"	4"
FRP W 0.5 / 14 gauge	0,083	0,005	0,033	0,016	-
FRP W 1.2 / 11 gauge	0,122	0,012	0,070	0,035	0,018
FRP W 1.3 / 10 gauge	0,129	0,013	0,079	0,039	0,020
FRP W 1.7 / 9 gauge	0,148	0,017	-	0,052	0,026
FRP W 2 / 8 gauge	0,161	0,020	-	0,061	0,031
FRP W 3.1* / 6 gauge*	0,198	0,031	-	0,093	0,046
FRP W 3.9* / 4 gauge*	0,222	0,039	-	0,117	0,058
FRP W 4.7* / 2 gauge*	0,245	0,047	-	0,142	0,071
FRP W 7.6* / 0 gauge*	0,311	0,076	-	0,228	0,114

* - Sand coated.



Standard sheets

FRP mesh sheet 4 times lighter than steel one. It is easy to handle and saves labor and equipment.

Wire size	Width	Length	Spacing	Sheet Weight					
				FRP W 1.7 9 gauge	FRP W 2 8 gauge	FRP W 3.1* 6 gauge*	FRP W 3.9* 4 gauge*	FRP W 4.7* 2 gauge*	FRP W 7.6* 0 gauge*
	ft.	ft.	in.	lbs	lbs	lbs	lbs	lbs	lbs
FRP W 1.7 9 gauge	4'	9' - 10'	4x4	3,73	4,48	6,97	8,48	10,81	17,25
	4'	9' - 10'	8x8	1,87	2,24	3,48	4,24	5,40	8,63
	4'3"	9' - 10'	4x4	4,04	4,85	7,55	9,18	11,71	18,69
	4'3"	9' - 10'	8x8	2,02	2,42	3,77	4,59	5,86	9,35
	4'7"	9' - 10'	4x4	4,35	5,22	8,13	9,89	12,61	20,13
	4'7"	9' - 10'	8x8	2,18	2,61	4,06	4,94	6,31	10,06
FRP W 2 8 gauge	4'11"	9' - 10'	4x4	4,66	5,60	8,71	10,60	13,51	21,57
	4'11"	9' - 10'	8x8	2,33	2,80	4,36	5,30	6,76	10,78
	5'3"	9' - 10'	4x4	4,97	5,97	9,29	11,30	14,41	23,01
FRP W 3.1* 6 gauge*	5'3"	9' - 10'	8x8	2,49	2,98	4,65	5,65	7,21	11,50
	5'7"	9' - 10'	4x4	5,28	6,34	9,87	12,01	15,31	24,44
	5'7"	9' - 10'	8x8	2,64	3,17	4,94	6,00	7,66	12,22
FRP W 3.9* 4 gauge*	5'11"	9' - 10'	4x4	5,60	6,71	10,45	12,71	16,21	25,88
	5'11"	9' - 10'	8x8	2,80	3,36	5,23	6,36	8,11	12,94
	6'3"	9' - 10'	4x4	5,91	7,09	11,03	13,42	17,12	27,32
FRP W 4.7* 2 gauge*	6'3"	9' - 10'	8x8	2,95	3,54	5,52	6,71	8,56	13,66
	6'7"	9' - 10'	4x4	6,22	7,46	11,61	14,13	18,02	28,76
	6'7"	9' - 10'	8x8	3,11	3,73	5,81	7,06	9,01	14,38
FRP W 7.6* 0 gauge*	6'11"	9' - 10'	4x4	6,53	7,83	12,19	14,83	18,92	30,19
	6'11"	9' - 10'	8x8	3,26	3,92	6,10	7,42	9,46	15,10
	7'3"	9' - 10'	4x4	6,84	8,21	12,78	15,54	19,82	31,63
	7'3"	9' - 10'	8x8	3,42	4,10	6,39	7,77	9,91	15,82
	7'7"	9' - 10'	4x4	7,15	8,58	13,36	16,25	20,72	33,07
* - Sand coated.	7'7"	9' - 10'	8x8	3,57	4,29	6,68	8,12	10,36	16,54

Mechanical properties

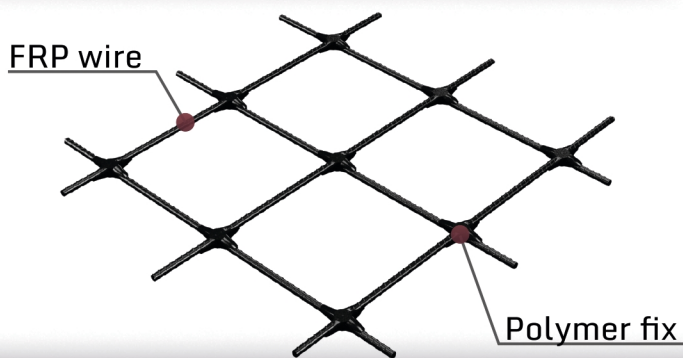
Galen FRP wire reinforcement doesn't prone to rust and aggressive environment, while its high tensile strength reduces crack formation.

Wire size	Nominal Dia.	Nominal Area	Weight per foot	Breaking load		Tensile strength		Tensile modulus of elasticity	
	in.	sq. in.		lb	kN	ksi	MPa	ksi	MPa
FRP W 0.5 / 14 gauge	0,083	0,005	0,016	864,25	3,84	159,50	1100,00	6887,50	47500
FRP W 1.2 / 11 gauge	0,122	0,012	0,033	1865,52	8,30	159,50	1100,00	6887,50	47500
FRP W 1.3 / 10 gauge	0,129	0,013	0,039	2088,45	9,29	159,50	1100,00	6887,50	47500
FRP W 1.7 / 9 gauge	0,148	0,017	0,052	2759,04	12,27	159,50	1100,00	6887,50	47500
FRP W 2 / 8 gauge	0,161	0,020	0,062	3263,20	14,52	159,50	1100,00	6887,50	47500
FRP W 3.1* / 6 gauge*	0,198	0,031	0,097	4931,02	21,93	159,50	1100,00	6887,50	47500
FRP W 3.9* / 4 gauge*	0,222	0,039	0,118	6196,88	27,57	159,50	1100,00	6887,50	47500
FRP W 4.7* / 2 gauge*	0,245	0,047	0,150	7534,46	33,51	159,50	1100,00	6887,50	47500
FRP W 7.6* / 0 gauge*	0,311	0,076	0,240	12145,88	54,03	159,50	1100,00	6887,50	47500

* - Sand coated.



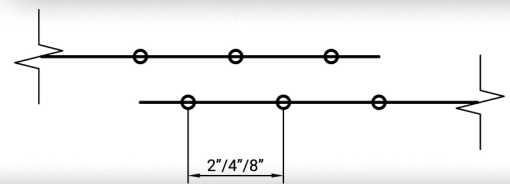
Aircraft hangar floor construction, Florida, USA



Why FRP wire reinforcement?

- High tensile strength: 2 times stronger than steel
- High corrosion resistance: resistant to chlorides and water exposure
- Light weight: 4 times lighter than steel
- No memory: retains its flat shape when unrolled

Edge lap detail



Areas of application:

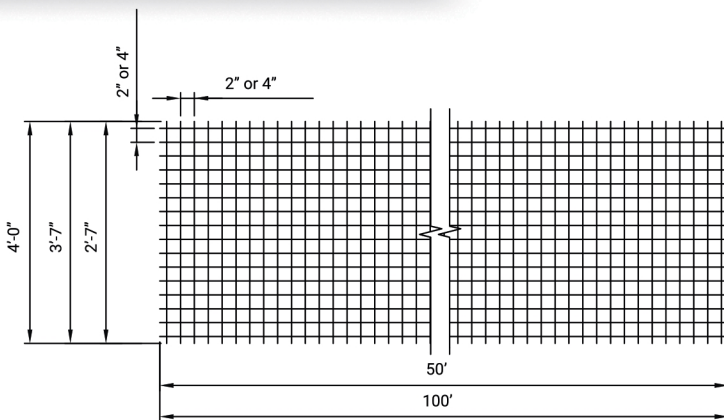
- Flatworks and slab-on-grade shrinkage control;
- Concrete structure rehabilitation;
- Shotcrete reinforcement;
- Precast elements reinforcement.



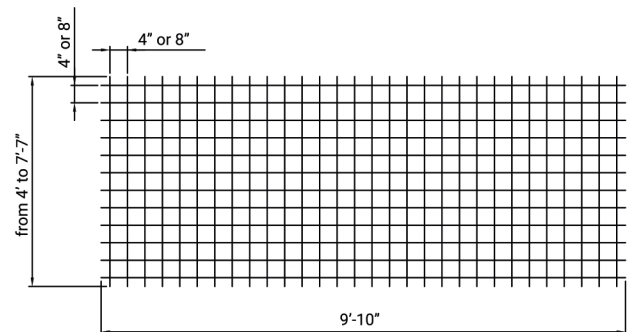
Features

- **Packaging:** Sheets and rolls.
- **Handling:** Avoid contact with skin and eyes. Provide ventilation in place.
- **Storage:** Keep out of direct sunlight and dusts. Provide easy handling. The mesh in cards and in rolls should be stored in stacks no more than 2 and 6 mm high respectively.
- **Waste Disposal:** Scrap may be disposed of in a sanitary landfill in accordance with local regulations.
- **Special Shipping Information:** None.
- **Safety Instructions:** Always use eye protection when cutting. Wear loose fitting long sleeved shirts that cover to the base of the neck, long pants and gloves. Use vacuum equipment to clean up clothing and waste product. Avoid dry sweeping or using compressed air. Have access to safety showers and eye wash stations. Wash work clothes separately from other clothing.
- **Cutting Instructions:** Use hacksaw, diamond or grit blades for cutting. Do not use direct flame. Do not use shear cutter.

Standard roll mesh



Standard sheet mesh



4x lighter



lower installation cost



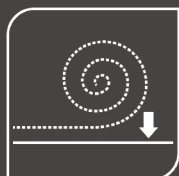
2x stronger



rust free



easier to haul



no memory

1206 Stirling Road 6A/B
 Dania Beach, FL 33004
 tel +1 (305) 833-7066
 fax +1 (305) 675-8480
info@galenpanamerica.com



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