

### Why use Farrat Neoprene CR75?

Farrat Neoprene CR is a high quality, easy to use and economical elastomeric isolation material. It is produced in the UK by Farrat using high quality ISO6446 compliant chloroprene compound. Farrat Neoprene CR provides excellent low frequency vibration, acoustic and shock isolation and has been used globally in industrial and structural applications.

### Features

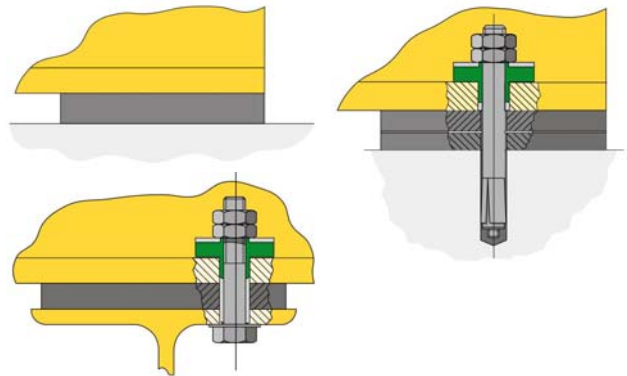
- Tested and approved to ISO6446 and BS6177.
- Medium resilience and damping characteristics.
- Excellent shock absorption characteristics.
- Excellent ozone, oil and general chemical resistance.
- Low level of creep.
- Long lifetime (in excess of 60 years).
- Fire / flame resistance.
- Can be supplied as sheets or cut to size pads and strips (including holes and slots if required) according to the customer's requirements.

### Applications

Farrat Neoprene has been used in a vast range of applications such as;

- Acoustic structural bearings (plain pads, strips or laminated).
- Anti vibration pads, steelwork acoustic isolators.\*
- Resilient seating connections within concrete and steel building structures to allow movement and rotation.
- Acoustic strip bearings for walls.
- Slide bearings.
- Plain pad isolators for machinery and plant equipment.

In low pressure applications it may be necessary to consider alternative materials such as Farrat Isomat. Farrat are happy to advise and provide technical calculations to specify the most appropriate material.



\*Where bolt through connections are required, Farrat Anti-vibration (AW) washers and bushes should be incorporated in order to allow free movement of the pad and to ensure that the bolt does not transmit vibration across the connection.

Characteristics	Unit	Test Standard	CR75
Colour			Black
Thicknesses	mm		5, 10, 15, 20, 25
Hardness (IRHD) ±5		BS ISO 48	75
Static Shear Modulus	MPa	BS ISO 1827:2007	1.76
Ratio Dyn to Static Modulus			2
Maximum Residual Compression	%	EN ISO 1856	
Compression set	%	BS ISO 815:1991	11
Creep			Minimal
Tensile stress at break	N/mm <sup>2</sup> / MPa	BS ISO 37	14.3
Elongation at break	%	BS ISO 37	280
Low Temperature Resistance		BS ISO 6446 & BS6177	Pass
Ozone Resistance		BS ISO 1431-1	Pass
Operating Temperatures*	°C		-30 to +120
Properties subject to change outside range	°C		-10 to +80
Flammability		DIN 4102 EN ISO 11925-2	B2 B, C, D
Operational life (subject to environment)	years		65+
Standard Sheet Size	mm		1000 x 500

For more detailed information and explanations of the pad performance outlined in this datasheet please refer to the Farrat design document: SVI-Structural Bearing Design.

**AVM - CR75 Chloroprene / Neoprene - 10b**  
**High Performance vibration isolation material**



Material Code	Material Thickness	Pad Length	Pad Width	Pad Area	Applied Load	Applied Load	Applied Load	Pressure (Max 15)	Shape Factor	Compression Modulus E	Spring Const K	Maximum Static Deflection (Max 15%)	Vertical Dynamic Natural Frequency (fnd)
CR75-5	5	50	50	2500	24.3	2431.1	2.4	9.7	2.5	64.8	32414	0.75	26.0
CR75-5	5	75	75	5625	84.4	8437.5	8.4	15.0	3.8	139.1	156490	0.54	30.6
CR75-5	5	100	100	10000	150.0	15000.0	15.0	15.0	5.0	234.0	467991	0.32	39.8
CR75-5	5	150	150	22500	337.5	33750.0	33.8	15.0	7.5	458.6	2063584	0.16	55.6
CR75-5	5	200	200	40000	600.0	60000.0	60.0	15.0	10.0	691.5	5532221	0.11	68.3
CR75-5	5	250	250	62500	937.5	93750.0	93.8	15.0	12.5	904.4	11305122	0.08	78.2
CR75-5	5	300	300	90000	1,350.0	135000.0	135.0	15.0	15.0	1086.1	19550377	0.07	85.6
CR75-5	5	500	500	250000	3,750.0	375000.0	375.0	15.0	25.0	1534.9	76746890	0.05	101.8
CR75-5	5	50	500	25000	375.0	37500.0	37.5	15.0	4.5	197.5	987869	0.38	36.5
CR75-5	5	100	500	50000	750.0	75000.0	75.0	15.0	8.3	537.1	5371206	0.14	60.2
CR75-5	5	150	500	75000	1,125.0	112500.0	112.5	15.0	11.5	825.9	12388770	0.09	74.7
CR75-5	5	250	500	125000	1,875.0	187500.0	187.5	15.0	16.7	1189.4	29733838	0.06	89.6
CR75-10	10	50	50	2500	6.5	650.6	0.7	2.6	1.3	17.3	4337	1.50	18.4
CR75-10	10	75	75	5625	31.6	3156.6	3.2	5.6	1.9	37.4	21044	1.50	18.4
CR75-10	10	100	100	10000	97.2	9724.2	9.7	9.7	2.5	64.8	64828	1.50	18.4
CR75-10	10	150	150	22500	337.5	33750.0	33.8	15.0	3.8	139.1	312980	1.08	21.7
CR75-10	10	200	200	40000	600.0	60000.0	60.0	15.0	5.0	234.0	935982	0.64	28.1
CR75-10	10	250	250	62500	937.5	93750.0	93.8	15.0	6.3	342.7	2141599	0.44	34.0
CR75-10	10	300	300	90000	1,350.0	135000.0	135.0	15.0	7.5	458.6	4127168	0.33	39.3
CR75-10	10	500	500	250000	3,750.0	375000.0	375.0	15.0	12.5	904.4	22610244	0.17	55.3
CR75-10	10	50	500	25000	202.7	20266.7	20.3	8.1	2.3	54.0	135111	1.50	18.4
CR75-10	10	100	500	50000	750.0	75000.0	75.0	15.0	4.2	168.8	843888	0.89	23.9
CR75-10	10	150	500	75000	1,125.0	112500.0	112.5	15.0	5.8	299.7	2247497	0.50	31.8
CR75-10	10	250	500	125000	1,875.0	187500.0	187.5	15.0	8.3	537.1	6714007	0.28	42.6
CR75-15	15	50	50	2500	3.1	311.2	0.3	1.2	0.8	8.3	1383	2.25	15.0
CR75-15	15	75	75	5625	14.6	1463.8	1.5	2.6	1.3	17.3	6506	2.25	15.0
CR75-15	15	100	100	10000	44.8	4482.0	4.5	4.5	1.7	29.9	19920	2.25	15.0
CR75-15	15	150	150	22500	218.8	21879.5	21.9	9.7	2.5	64.8	97242	2.25	15.0
CR75-15	15	200	200	40000	600.0	60000.0	60.0	15.0	3.3	111.7	297928	2.01	15.9
CR75-15	15	250	250	62500	937.5	93750.0	93.8	15.0	4.2	168.8	703240	1.33	19.5
CR75-15	15	300	300	90000	1,350.0	135000.0	135.0	15.0	5.0	234.0	1403974	0.96	23.0
CR75-15	15	500	500	250000	3,750.0	375000.0	375.0	15.0	8.3	537.1	8952009	0.42	34.8
CR75-15	15	50	500	25000	93.5	9347.9	9.3	3.7	1.5	24.9	41546	2.25	15.0
CR75-15	15	100	500	50000	594.1	59411.0	59.4	11.9	2.8	79.2	264049	2.25	15.0
CR75-15	15	150	500	75000	1,125.0	112500.0	112.5	15.0	3.8	145.8	728778	1.54	18.1
CR75-15	15	250	500	125000	1,875.0	187500.0	187.5	15.0	5.6	281.0	2341615	0.80	25.1
CR75-20	20	50	50	2500	1.9	191.7	0.2	0.8	0.6	5.1	639	3.0	13.0
CR75-20	20	75	75	5625	8.6	863.0	0.9	1.5	0.9	10.2	2877	3.0	13.0
CR75-20	20	100	100	10000	26.0	2602.2	2.6	2.6	1.3	17.3	8674	3.0	13.0
CR75-20	20	150	150	22500	126.3	12626.5	12.6	5.6	1.9	37.4	42088	3.0	13.0
CR75-20	20	200	200	40000	389.0	38897.0	38.9	9.7	2.5	64.8	129657	3.0	13.0
CR75-20	20	250	250	62500	927.9	92786.5	92.8	14.8	3.1	99.0	309288	3.0	13.0
CR75-20	20	300	300	90000	1,350.0	135000.0	135.0	15.0	3.8	139.1	625960	2.2	15.3
CR75-20	20	500	500	250000	3,750.0	375000.0	375.0	15.0	6.3	342.7	4283199	0.9	24.1
CR75-20	20	50	500	25000	54.5	5448.8	5.4	2.2	1.1	14.5	18163	3.0	13.0
CR75-20	20	100	500	50000	343.2	34321.3	34.3	6.9	2.1	45.8	114404	3.0	13.0
CR75-20	20	150	500	75000	957.3	95725.0	95.7	12.8	2.9	85.1	319083	3.0	13.0
CR75-20	20	250	500	125000	1,875.0	187500.0	187.5	15.0	4.2	168.8	1054860	1.8	16.9
CR75-25	25	50	50	2500	1.4	136.3	0.1	0.5	0.5	3.6	363	3.75	11.6
CR75-25	25	75	75	5625	5.8	583.5	0.6	1.0	0.8	6.9	1556	3.75	11.6
CR75-25	25	100	100	10000	17.2	1724.0	1.7	1.7	1.0	11.5	4597	3.75	11.6
CR75-25	25	150	150	22500	82.5	8254.3	8.3	3.7	1.5	24.5	22011	3.75	11.6
CR75-25	25	200	200	40000	253.9	25395.0	25.4	6.3	2.0	42.3	67720	3.75	11.6
CR75-25	25	250	250	62500	607.8	60776.5	60.8	9.7	2.5	64.8	162071	3.75	11.6
CR75-25	25	400	400	160000	2,400.0	240000.0	240.0	15.0	4.0	156.6	1002548	2.39	14.5
CR75-25	25	500	500	250000	3,750.0	375000.0	375.0	15.0	5.0	234.0	2339956	1.60	17.8
CR75-25	25	50	500	25000	36.3	3630.1	3.6	1.5	0.9	9.7	9680	3.75	11.6
CR75-25	25	100	500	50000	224.1	22410.1	22.4	4.5	1.7	29.9	59760	3.75	11.6
CR75-25	25	150	500	75000	626.0	62599.8	62.6	8.3	2.3	55.6	166933	3.75	11.6
CR75-25	25	250	500	125000	1,875.0	187500.0	187.5	15.0	3.3	111.7	558615	3.36	12.3