Напольные панельно-лучистые системы

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

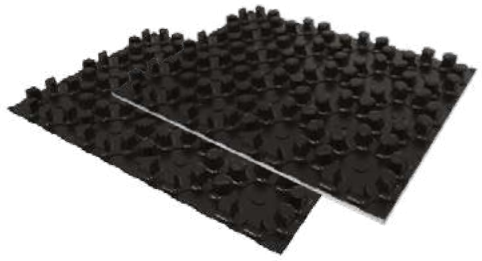
Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-88
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: tec@nt-rt.ru || сайт: https://tiemme.nt-rt.ru/

01c TIEMME SLIM

INSULATION PANEL



4519

Thermoformed panel without thermal insulation with self-adhesive bottom or with 5mm of EPS 200 insulation, with embossed ashlars for locking the pipe even at 45°. Specific for renovations.

Code	Insulation thickness (mm)	Total thickness (mm)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0641	-	19		17,92/215,04	16
450 0642	5	23,6		22,40/134,40	20

TECHNICAL CHARACTERISTICS

	Codes	
	450 0641	**450 0642**
Panel dimensions (mm)	1400 x 800 Self-adhesive base	1400 x 800
Insulation thickness (mm)	-	5
Ashlars thickness (mm)	18	18
Total panel thickness (mm)	19	23,6
Pipes thickness (mm)	16 - 17	16 - 17
Minimum pipe distance (mm)	50 (90° laying) - 71 (45° laying)	50 (90° laying) - 71 (45° laying)
Thermal resistance on average effective thickness Rλ,ins (m²K/W)	-	0,15
Thickness of thermo-perforated foil in PS (mm)	1	0,6
Declared thermal conductivity (W/mk)	-	0,034
Fire reaction class EN 13501-1 (Euroclass)	E	E
Panels per package (n)	16	20
Panel area per package (m²)	17,92	22,40

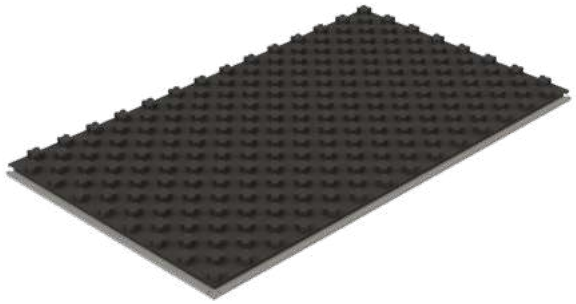
GUIDE TO SCREED MAKING

The optimal performance of the Tiemme SLIM radiant system is achieved when the screed, an integral part of the radiant section, completely embraces the pipe, ensuring optimal heat transfer by conduction. A good screed must be able to ensure the levelling of the surfaces, evenly distribute the loads, be an excellent foundation for flooring and, above all, ensure a perfect reception for floor heating systems. Tiemme recommends in combination with the innovative Tiemme SLIM system the KNAUF mixes: NE 499 for screeds up to 5/10 mm above the ashlar, NE 425 for screeds up to 20 mm above the ashlar. NOTE: In the case of using a self-levelling screed, follow the instructions of the supplier.

		Codes	
Knauf Screed		**450 0641**	**450 0642**
NE 499 - Thickness 5/10 mm λ = 1,3 W/(mk)	Panel thickness	19 mm	23,6 mm
	Panel thickness + Screed	24 / 29 mm	33,6 mm
NE 425 - Thickness 20 mm λ = 1,4 W/(mk)	Panel thickness	19 mm	23,6 mm
	Panel thickness + Screed	39 mm	43,6 mm

01c LOW BLACK

INSULATION PANEL



4518GRF

Insulating panel for floor radiant systems, made of closed cell sintered expanded polystyrene, with graphite additives, coupled

with a protection layer in thermo-welded laminated polystyrene HIPS 170 µm, CE marked, suitable for radiant systems powered by water for heating and cooling integrated in the structures according to UNI EN 1264.

Code	Insulation thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0567	15	300		23,52/94,08	21
450 0568	23	300		17,92/71,68	16
450 0569	38	300		11,20/44,80	10

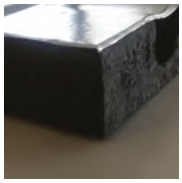
TECHNICAL CHARACTERISTICS

	Codes		
	450 0567	**450 0568**	**450 0569**
Thermal resistance EN 13163 (m²k/W)	**0,50**	**0,77**	**1,27**
Compression resistance to 10% UNI EN 826 (kPa)	300		
Insulation thickness (mm)	15	23	38
Total thickness (mm)	33	41	56
Cover film (µm)	170		
Minimum pipe distance (mm)	50		
Thermal conductivity UNI EN 12667 (W/mk)	0,030		
Water absorption UNI EN 12087 (%)	5		
Reaction to fire EN 13501-1 (Euroclass)	E		
Total panel size (mm)	1425 x 825		
Useful panel size (mm)	1400 x 800		
Useful panel area(m²)	1,12		
Panels per package (n)	21	16	10
Panel area per package (m²)	23,52	17,92	11,20

4517GRF

Insulating panel for dry floor radiant systems in EPS 300, with graphite additives, pre-coupled to a 1050 alloy aluminium foil with high thermal conductivity. Low thermal inertia due to the absence of screed that allows fast response times. Suitable for heating and cooling systems is available with 100 or 150 mm pipe distance.





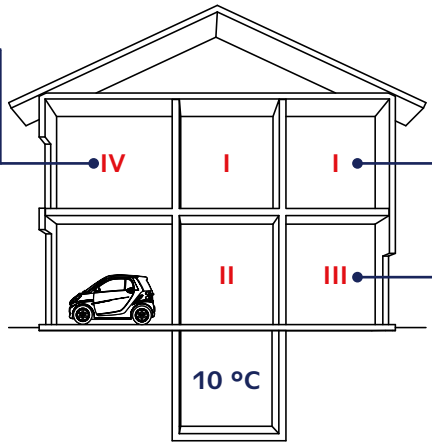
Code	Thickness (mm)	Centre distance (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0562	26	100	300		11,20/89,60	10
450 0563	42	100	300		6,72/53,76	6
450 0564	26	150	300		10,5/84	10
450 0565	42	150	300		6,30/50,40	6

TECHNICAL CHARACTERISTICS

	Codes			
	450 0562	**450 0563**	**450 0564**	**450 0565**
Insulation thickness (mm)	26	42	26	42
Total thickness (mm)	**26**	**42**	**26**	**42**
Aluminium Alloy/ Thickness (mm)	1050/ 0,15			
Declared thermal conductivity (W/mk)	0,031			
Thermal resistance Rλ,ins (m²k/W)	**0,75**	**1,27**	**0,75**	**1,26**
Compressive strength at 10% deformation (kPa)	300			
Reaction to fire (Euroclass)	E			
Total panel size (mm)	1400 x 800		1400 x 750	
Minimum pipe distance (mm)	100		150	
Useful panel area (m²)	1,12		1,05	

THICKNESS ACCORDING TO UNI EN 1264

CASE IV
(External T > 0 °C)
Dim. A 42 mm
Panel cod.: 450 0563 (450 0565)



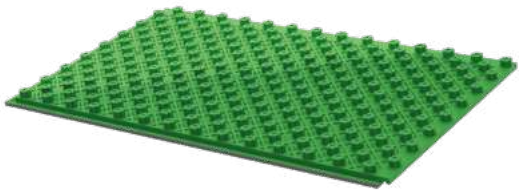
CASE I
Dim. A 26 mm
Panel cod.: 450 0562 (450 0564)

CASE II AND III
Dim. A 42 mm
Panel cod.: 450 0563 (450 0565)

01D NEW CLASSIC GRAPHITE

INSULATION PANEL

NEW



4524GRF

Insulating panel in sintered expanded polystyrene with graphite additives in compliance with UNI EN 13163. It is equipped with reliefs (ashlars) for the locking of the pipe - 50 mm pipe distance – and interlocking grooves on the perimeter for a solid joint between panels.

Insulation thickness complies with UNI EN 1264:2021

Code	Insulation thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0479	10	250		21,12/84,48	22
450 0721	23	150		15,68/62,72	14
450 0722	38	150		11,20/44,80	10
450 0725	45	150		8,96/35,84	8
450 0726	60	150		7,84/31,36	7

TECHNICAL CHARACTERISTICS

	Codes				
	450 0479	**450 0721**	**450 0722**	**450 0725**	**450 0726**
Thermal resistance EN 13163 (m²k/W)	**0,33**	**0,75**	**1,25**	**1,50**	**2,00**
Compression resistance to 10% UNI EN 826 (kPa)	250	150			
Insulation thickness (mm)	10	23	38	45	60
Total thickness (mm)	34	47	62	69	84
Cover film (µm)	160				
Minimum pipe distance (mm)	50				
Thermal conductivity UNI EN 12667 (W/mk)	0,030				
Water absorption UNI EN 12087 (%)	7	4			
Reaction to fire EN 13501-1 (Euroclass)	E				
Total panel size (mm)	1220 x 820	1425 x 825			
Useful panel size (mm)	1220 x 820	1400 x 800			
Useful panel area(m²)	0,96	1,12			
Panels per package (n)	22	14	10	8	7
Panel area per package (m²)	21,12	15,68	11,20	8,96	7,84

NEW

4528PANGRF

Thermoformed panel with ashlars in expanded polystyrene sintered with graphite coupled to a rigid black polystyrene foil with ashlars.

Conforming to EN 13163, it is equipped with reliefs for locking the pipe (50 mm pipe distance) and male/female joints for a solid joint.

The rigid sheet gives the panel greater resistance to wear and tear. The joint male/ female perimeter allows the overlapping of the sheets and makes it perfectly compatible with self-levelling liquid screeds.

Insulation thickness complies with UNI EN 1264:2021

Code	Insulation thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0729	10	200		20,16/100,8	18
450 0730	23	150		12,32/61,60	11
450 0731	38	150		8,96/44,80	8
450 0732	45	150		7,84/39,20	7
450 0733	60	150		5,60/28,00	5

TECHNICAL CHARACTERISTICS

	Codes				
	450 0729	**450 0730**	**450 0731**	**450 0732**	**450 0733**
Thermal resistance EN 13163 (m²k/W)	**0,33**	**0,75**	**1,25**	**1,50**	**2,00**
Compression resistance to 10% UNI EN 826 (kPa)	200	150			
Insulation thickness (mm)	10	23	38	45	60
Total thickness (mm)	32	45	60	67	82
Total thickness equivalente UNI EN 1264/3 (mm)	0,6				
Minimum pipe distance (mm)	50				
Thermal conductivity UNI EN 12667 (W/mk)	0,030				
Water absorption UNI EN 12087 (%)	6,5	4,0			
Reaction to fire EN 13501-1 (Euroclass)	E				
Total panel size (mm)	1450 X 850				
Useful panel size (mm)	1400 X 800				
Useful panel area(m²)	1,12				
Panels per package (n)	18	11	8	7	5
Panel area per package (m²)	20,16	12,32	8,96	7,84	5,60

4501PAN

Thermoformed panel with ashlars in sintered expanded polystyrene coupled to a rigid black polystyrene sheet with ashlars. Conforming to EN 13163, it is equipped with reliefs for locking the pipe (50 mm pipe distance) and male/female joints for a solid joint. The rigid sheet gives the panel greater resistance to wear and tear.

The joint male/ female perimeter allows the overlapping of the sheets and makes it perfectly compatible with self-levelling liquid screeds.

Code	Insulation thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0570	10	150		20,16/100,8	18
450 0531	20	150		13,44/67,2	12
450 0532	30	150		11,2/56	10
450 0687	40	150		8,96/44,8	8

TECHNICAL CHARACTERISTICS

	Codes			
	450 0570	**450 0531**	**450 0532**	**450 0687**
Thermal resistance EN 13163 (m²k/W)	**0,29**	**0,59**	**0,88**	**1,18**
Compression resistance to 10% UNI EN 826 (kPa)	150			
Insulation thickness (mm)	10	20	30	40
Total thickness (mm)	32	42	52	62
Rigid cover sheet (mm)	0,5			
Minimum pipe distance (mm)	50			
Thermal conductivity UNI EN 12667 (W/mk)	0,034			
Water absorption UNI EN 12087 (%)	0,5			
Reaction to fire EN 13501-1 (Euroclass)	E			
Total panel size (mm)	1450 X 850			
Useful panel size (mm)	1400 X 800			
Useful panel area(m²)	1,12			
Panels per package (n)	18	12	10	8
Panel area per package (m²)	20,16	13,44	11,20	8,96

01D CLIP GRAPHITE

INSULATION PANEL

4505GRF

Thermal insulation panel made of EPS sintered expanded polystyrene with graphite, smooth, with protection film and screen-printing 50 mm and multiple pipe distances.

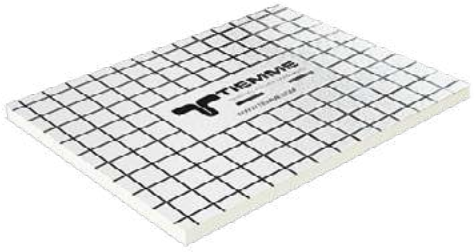
Code	Thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)
450 0558	23	150		12/72
450 0559	30	150		10/60
450 0560	40	150		10/40
450 0555	50	150		10/40
450 0561	60	150		8/32

TECHNICAL CHARACTERISTICS

	Codes				
	450 0558	**450 0559**	**450 0560**	**450 0555**	**450 0561**
Thermal resistance UNI EN 13163 (m²k/W)	**0,76**	**1,00**	**1,33**	**1,66**	**2,00**
Compression resistance to 10% UNI EN 826 (kPa)	150				
Insulation thickness (mm)	23	30	40	50	60
Total thickness (mm)	23	30	40	50	60
Minimum pipe distance (mm)	50				
Thermal conductivity UNI EN 12667 (W/mk)	0,030				
Water absorption UNI EN 12087 (%)	< 3,0				
Reaction to fire EN 13501-1 (Euroclass)	E				
Total roll size (mm)	12000 x 1000	10000 x 1000	10000 x 1000	10000 x 1000	8000 x 1000
Useful roll size (mm)	12000 x 1000	10000 x 1000	10000 x 1000	10000 x 1000	8000 x 1000
Useful roll area (m²)	12	10	10	10	8
Rolls per package (n)	1				
Roll area per package (m²)	12	10	10	10	8

01D CLIP SUPER

INSULATION PANEL



4505POL

Thermal insulation panel in polyiso PIR expanded foam (coupled polyurethane), smooth, with protection film and screen-printing 50 mm and multiple pipe distances. Supplied as book.

Code	Thickness (mm)	C.R. 10% (kPa)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0500	20	>130		16,8/134,4	7
450 0501	30	>130		12/84	5
450 0502	40	>130		9,6/67,2	4
450 0503	50	>130		9,6/48	4

TECHNICAL CHARACTERISTICS

	Codes			
	450 0500	**450 0501**	**450 0502**	**450 0503**
Thermal resistance UNI EN 13163 (m²k/W)	**0,85**	**1,30**	**1,70**	**2,15**
Compression resistance to 10% UNI EN 826 (kPa)	>130			
Insulation thickness (mm)	20	30	40	50
Total thickness (mm)	20	30	40	50
Minimum pipe distance (mm)	50			
Thermal conductivity UNI EN 12667 (W/mk)	0,023			
Density (kg/m³)	30			
Water absorption UNI EN 12087 (%)	< 1,0			
Reaction to fire EN 13501-1 (Euroclass)	F			
Total panel size (mm)	1000 x (1200 + 1200)			
Useful panel size (aperto) (mm)	1000 x 2400			
Useful panel area(aperto) (m²)	2,4			
Panels per package (n)	7	5	4	4
Superficie rotoli per Packaging (m²)	16,8	12	9,6	9,6

4502SIL

EPS-T stretch expanded polystyrene thermal insulation panel with embossed ashlars for pipe clamping. 50 mm and multiples pipe distances

Code	Insulation thickness (mm)	Price €/m²	Packaging (m²)	Packaging (no. panels)
450 0313	30		11,20/56	10

TECHNICAL CHARACTERISTICS

	Codes
	450 0313
Improvement of noise abatement (db)	**28**
Thermal resistance UNI EN 13163 (m²k/W)	0,75
Dynamic stiffness s' (MN/m³) UNI EN 29052-1, screed area mass per unit 110 (kg/m²)	20
Livello di comprimibilità sotto compressione 2 mm UNI EN 12431	CP2
Insulation thickness (mm)	30
Total thickness (mm)	52
Total thickness equivalente UNI EN 1264/3 (mm)	34
Thickness of the covering thermoformed sheath (mm)	0,8
Minimum pipe distance (mm)	50
Thermal conductivity UNI EN 12667 (W/mk)	0,040
Reaction to fire EN 13501-1 (Euroclass)	E
Total panel size (mm)	1450 x 850
Useful panel size (mm)	1400 x 800
Panel area (m²)	1,12
Panels per package (n)	10
Panel area per package (m²)	11,20

0200B

High density COBRAPEX cross-linked polyethylene pipe with EVOH oxygen barrier.

TECHNICAL CHARACTERISTICS

- Maximum operating temperature: 95 °C
- Thermal conductivity: 0,38 W/mk
- Complies with EN ISO 15875-2
- Anti-oxygen barrier in EVOH compliant with DIN 4726
- Composition: PE-Xb

Code	Type	Price €/m	Unit/Box (m)
020 0005	16 x 2,0		120/3240
020 0018	16 x 2,0		200/3600
020 0003	16 x 2,0		300/3600
020 0001	16 x 2,0		600/3000
020 0008	17 x 2,0		120/3240
020 0071	17 x 2,0		200/3200
020 0006	17 x 2,0		300/2700
020 0002	17 x 2,0		600/3000

4511

Acoustic insulation for floor sound insulation.

TECHNICAL CHARACTERISTICS

- Width: 1,04 m (4 cm banda adesiva)
- Length: 5 m
- Thickness: 5 mm

Match panel 4528PANGRF Techno Graphite CAM

Code	Type	Price €/m²	Unit/Box (m²)
450 0317	-		5/160

4513

Perimeter strip for sound insulation, "L" preformed, adhesive on both external sides.

Code	Type	Price €/m	Unit/Box (m)
450 0389	H 150 x 6 mm		50/200

4507

Perimeter strip in expanded PE with adhesive back and PE sheet to contain mortar.

With pre-cut H = 100 mm

Code	Type	Price €/m	Unit/Box (m)
450 0443	H 150 x 5 mm		50/250
450 0007	H 150 x 8 mm		25/125

1480P

Plastic 90-fold elbow for the protection and support of the COBRAPEX pipe near the connection to the distribution manifold.

Code	Type	Price €	Unit/Box
034 0077	Pipe Ø 16 - 18		25/500

4527

Clip for fixing the mesh. Made of plastic material and complete of anchoring fins.

Code	Type	Price €	Unit/Box
450 0018	H = 28 mm		100/1000

4540

Screed additive in aqueous solution composed of acrylic polymers; reduces hygroscopic withdrawals by increasing the thermal resistance and improving thermal conductivity.

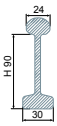
TECHNICAL CHARACTERISTICS

- Dosage: 1 kg of additive x 100 Kg of cement

Code	Type	Price €/kg	Unit/Box (kg)
450 0019	10 Kg ≈ 9,6 l		10/10
450 0017	25 Kg ≈ 24 l		25/25

4508

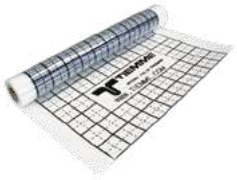
PE expansion joint, self-adhesive base for smooth and panel with ashlars.



TECHNICAL CHARACTERISTICS

- Height: 90 mm
- Length: 2 m

Code	Type	Price €/m	Unit/Box (m)
450 0023	-		20/180



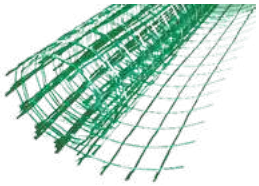
4503

PE sheet with insulation function and moisture barrier.

TECHNICAL CHARACTERISTICS

- Width: 1,2 m
- Length: 100 m
- Thickness: 0,15 mm

Code	Type	Price €/m²	Unit/Box (m²)
450 0025	-		120/120



4532

Fiberglass mesh treated for the reinforcement of concrete screeds.

TECHNICAL CHARACTERISTICS

- Mesh size: 40 x 40 mm
- Weight: 130 g/m²

2 mm wire mesh on request.

Code	Type	Price €/m²	Unit/Box (m²)
450 0152	1 m x 50 m		50/400
450 0022	1 m x 100 m		100/400

4539

Corrosion protection of metal parts with universal fungal bactericide for heating and cooling systems.

TECHNICAL CHARACTERISTICS

- Dosage: 1 l of additive x 100 l of circulating water

Code	Type	Price €	Unit/Box
450 0486	1 l		1/12

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-88
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: tec@nt-rt.ru || сайт: https://tiemme.nt-rt.ru/