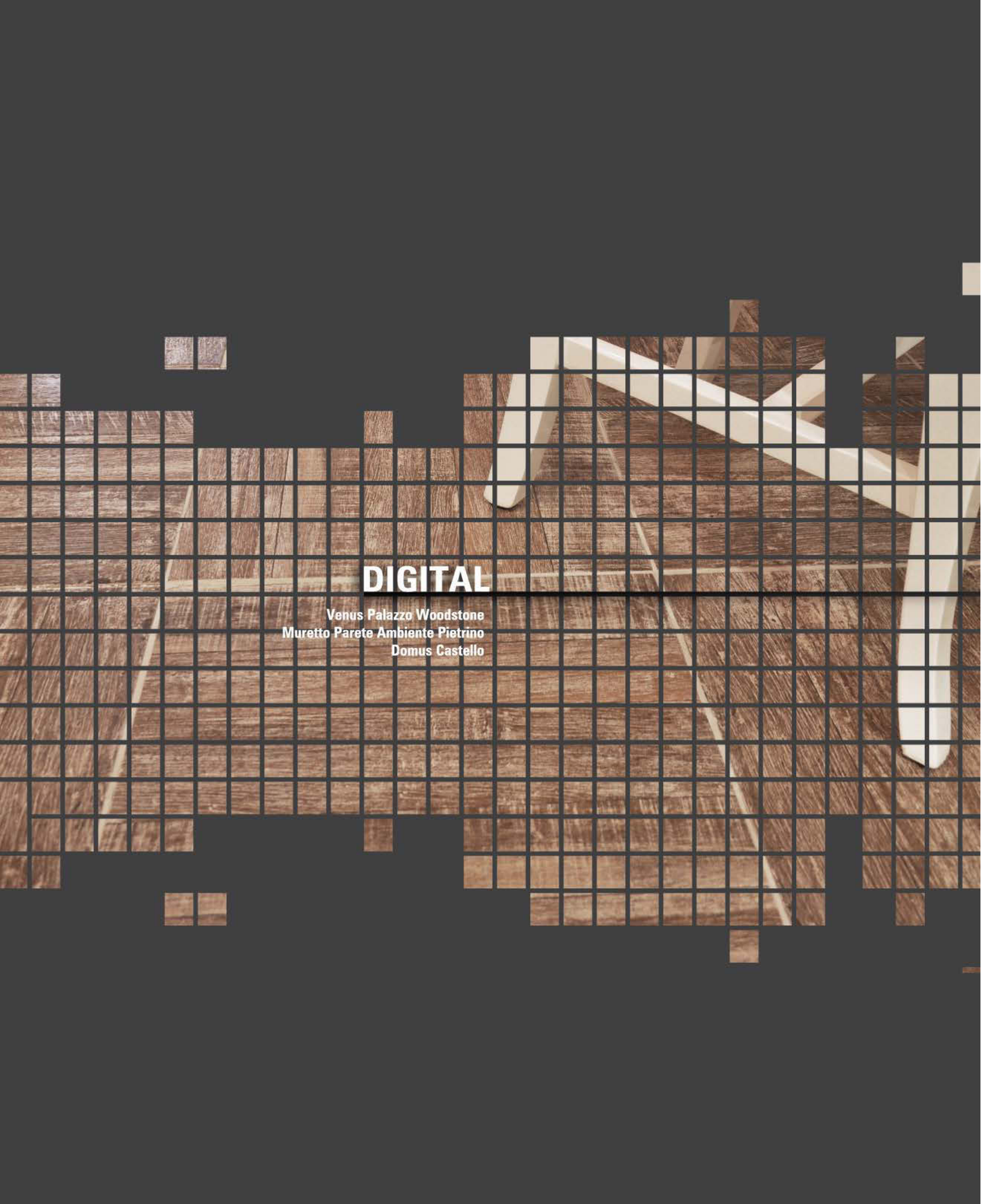
KERAMIKA KANJIŽA

2024

katalog catalogue

KERAMIKA
KANJIŽA
®


DIGITAL
Venus Palazzo Woodstone
Muretto Parete Ambiente Pietrino
Domus Castello

Venus zidne i podne pločice / wall and floor tiles 25X50, 33X33 cm

DIGITAL

Venus 25x50cm

Venus Noce 25x50cm

2550C116 25x50cm
Tapeto

825L117 8x25cm
Siena

625L116 6x25cm
Tapeto

850L117 8x50cm
Siena

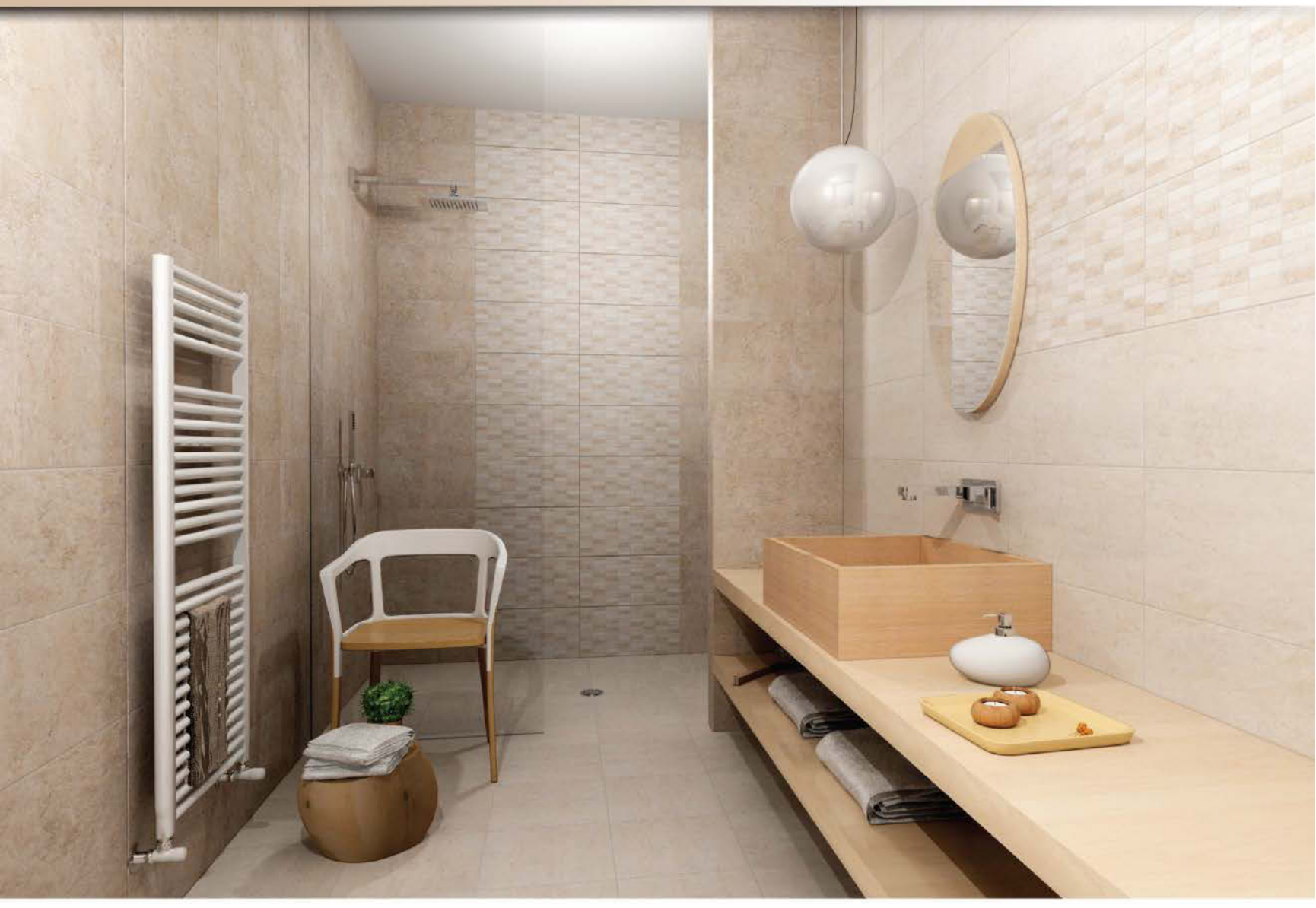
650L116 6x50cm
Tapeto

Venus 33x33cm

Venus Noce 33x33cm

Venus VENUS, VENUS NOCE 25X50, 33X33 CM

DIGITAL



Venus Mosaico 25x50cm

2550C118 25x50cm
Venus Caffe

850L118 8x50cm
Venus Caffe

Palazzo

DIGITAL

Palazzo Beige 25x50cm

Palazzo Rosso 25x50cm

Palazzo PALAZZO BEIGE, PALAZZO ROSSO, PALAZZO ADRIA 25X50, 33X33 CM

Palazzo Mosaico 25x50cm

Palazzo Mosaico Adria 25x50cm

425L099 4X25cm
Tiara Gold

425L099 4x25cm
Tiara

825L098 8X25cm
Luxury Palazzo

825L098 8X25cm
Luxury Adria

450L099 4X50cm
Tiara Gold

450L099 4x50cm
Tiara

750L114 7X50cm
Corona

850L098 8X50cm
Luxury Palazzo

S

A

GA

GHA

PEI 4

Palazzo Beige 33x33cm

PEI 3

Palazzo Rosso 33x33cm

PEI 3

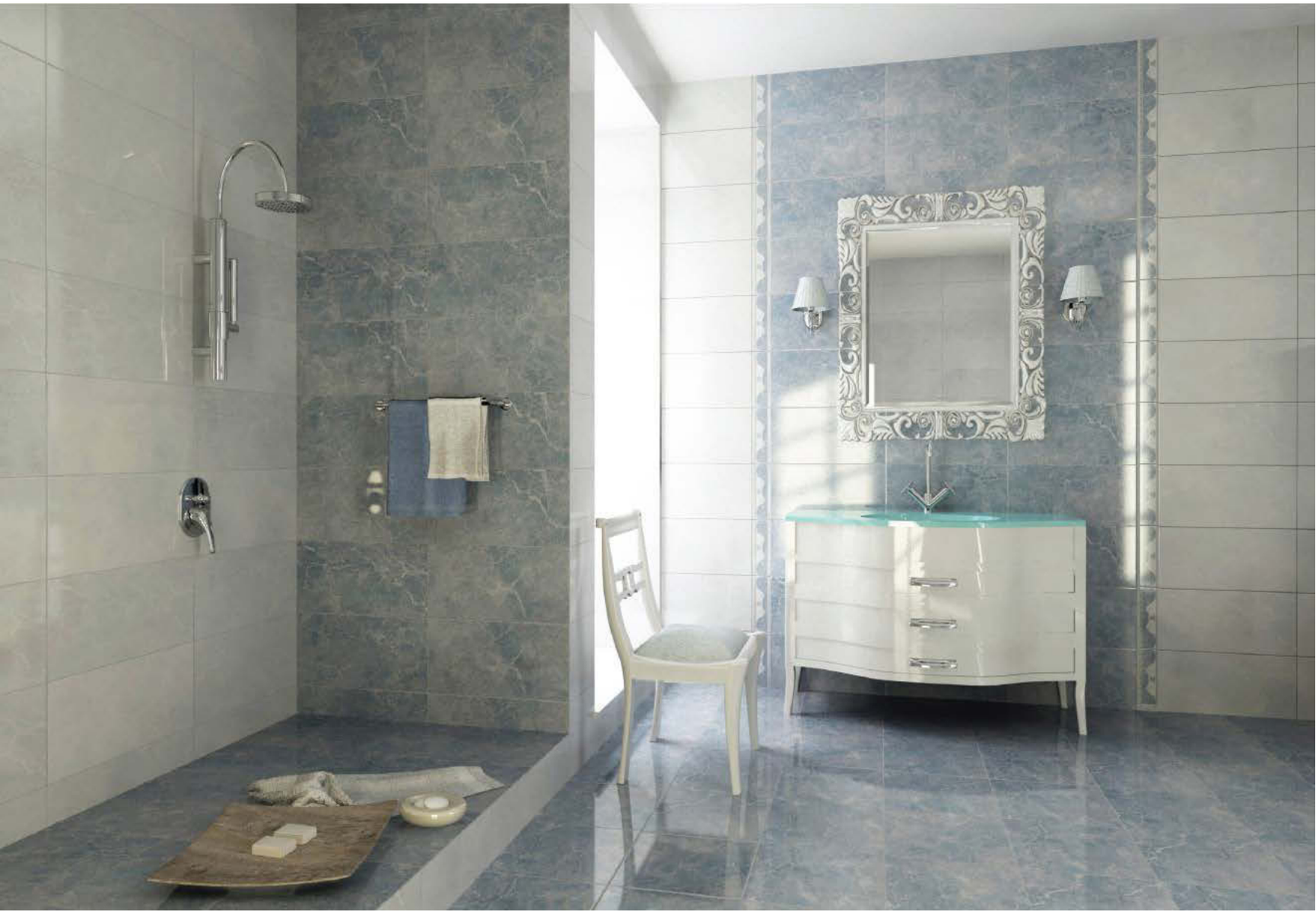
Palazzo Adria 33x33cm

Palazzo Imperia 25x50cm

Palazzo Adria 25x50cm

850L098 8X50cm
Luxury Adria

750L114 7X50cm
Corona Adria



Woodstone zidne i podne pločice / wall and floor tiles 25X50, 33X33 cm

DIGITAL

Woodstone Light 25x50cm

Woodstone Dark 25x50cm

M

GA

Garden 25X50cm

725L124 7X25cm
Garden

525L115 5X25cm
Arcobaleno

725L097 7X25cm
Mosaico Woodstone

750L097 7X50cm
Mosaico Woodstone

550L115 5X50cm
Arcobaleno

750L095 7X50cm
Aura Woodstone

750L124 7X50cm
Garden

PEI 4

Woodstone Light 33x33cm

M

A

GA

GHA

PEI 2

Woodstone Dark 33x33cm

Parete zidne i podne pločice / wall and floor tiles 25X50 cm

DIGITAL

Parete Freddo 25x50cm

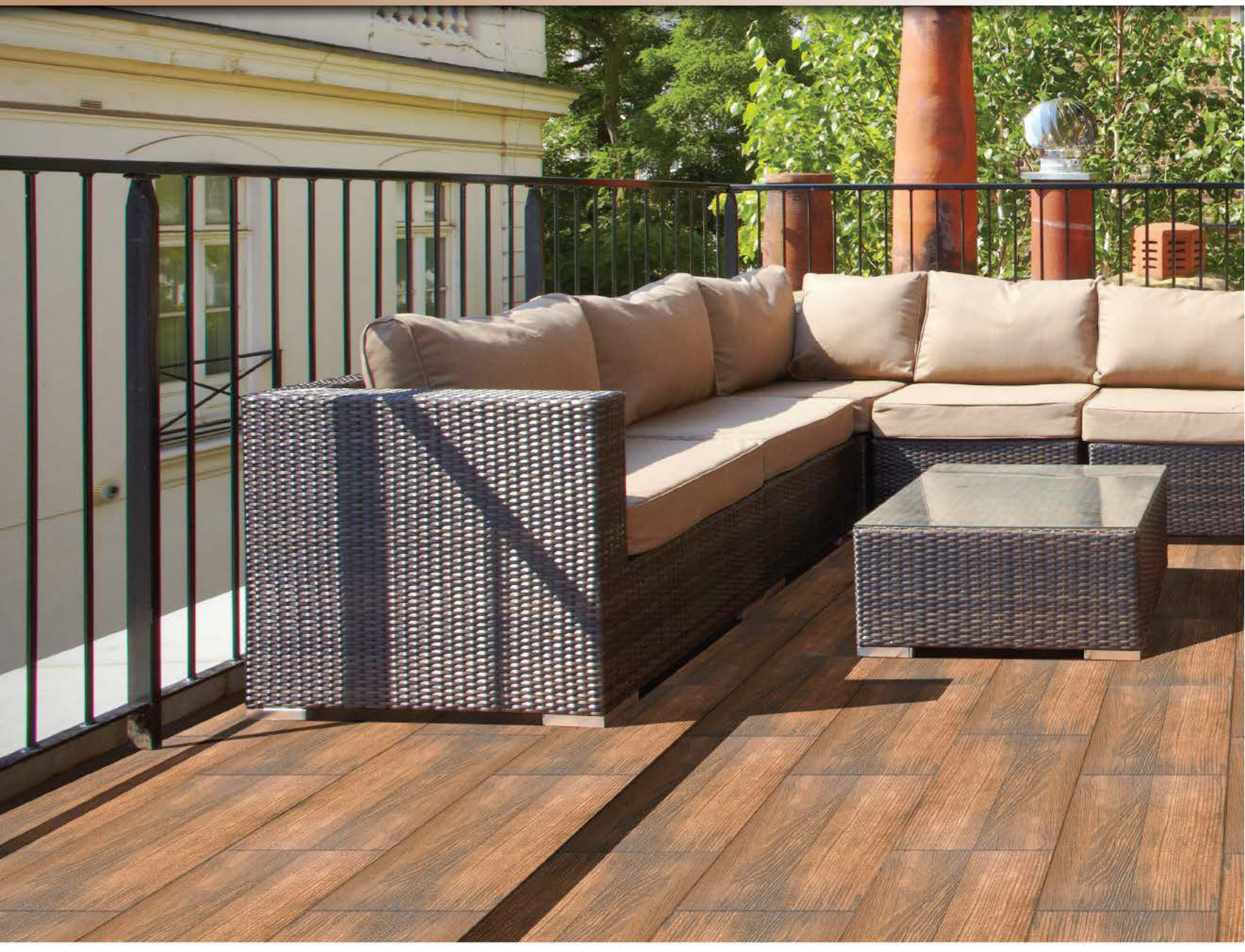
Parete Caldo 25x50cm

Muretto Marmo 25x50cm

Muretto Roccia 25x50cm

Ambiente podne pločice / floor tiles 25X50 cm

DIGITAL



PEI 3

Ambiente Noce 25X50cm

PEI 4

Ambiente Beige 25X50cm

Ambiente Bianco 25X50cm

Pietrino podne pločice / floor tiles 40X40cm

DIGITAL

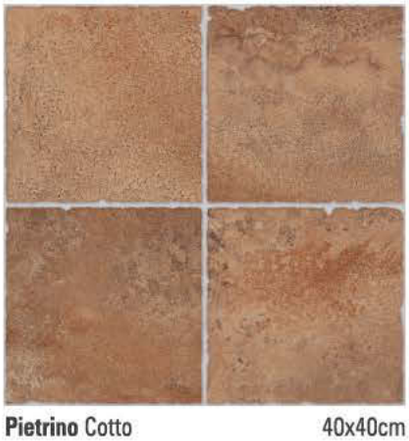
M

C

GA

GHA

PEI 4



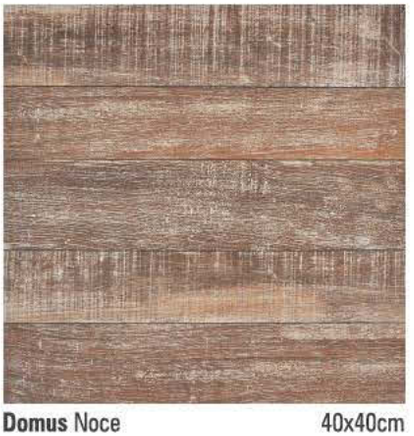
Pietrino Cotto 40x40cm

Pietrino 40x40cm

Pietrino Grigio 40x40cm

ПРИЯТЕЛ ЖИВОТНЕ СРЕДИНЕ
ENVIRONMENTALLY FRIENDLY

Domus Antico 40x40cm



Domus Noce 40x40cm

M

B

GA

GHA

PEI 4

Castello podne pločice / floor tiles 33X33 cm

DIGITAL

M

B

R9

GA

GHA

PEI 4

Castello 33x33cm

Castello Dorato 33x33cm

ITALIA NUOVA

Allegra Neox Amore

Allegra zidne i podne pločice / wall and floor tiles 25X50, 33X33 cm

Allegra Nera 25x50cm

Allegra Bianca 25x50cm

2550C096 25x50cm
Fantasia Nera

2550C096 25x50cm
Fantasia Bianca

825L096 8x25cm
Fantasia Nera

825L096 8x25cm
Fantasia Bianca

825L098 8x25cm
Luxury Gold

425L099 4x25cm
Tiara

850L096 8x50cm
Fantasia Nera

450L099 4x50cm
Tiara

850L098 8x50cm
Luxury Gold

850L096 8x50cm
Fantasia Bianca

PEI 2

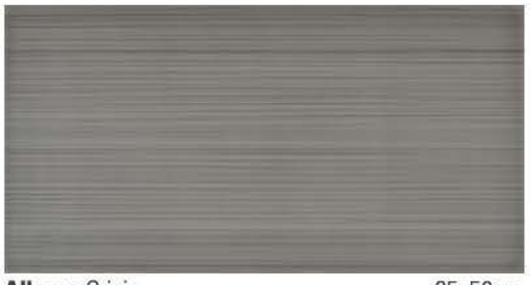
Allegra Nera 33x33cm

Allegra Bianca 33x33cm

PEI 4

Allegra ALLEGRA BIANCA, ALLEGRA NERA, ALLEGRA LILA, ALLEGRA PISTACCIO, ALLEGRA GRIGIO 25X50, 33X33 CM

S
GA
GHA



Allegra Grigio 25x50cm

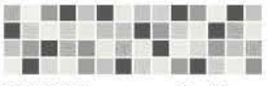
Allegra Pistaccio 25x50cm

2550C096 25x50cm
Fantasia Grigio

2550C096 25x50cm
Fantasia Pistaccio

825L096 8x25cm
Fantasia Grigio

825L096 8x25cm
Fantasia Pistaccio



725L097 7x25cm
Mosaico Allegra Grigio

725L097 7x25cm
Mosaico Allegra Pistaccio

850L096 8x50cm
Fantasia Grigio

850L096 8x50cm
Fantasia Pistaccio

750L097 7x50cm
Mosaico Allegra Grigio

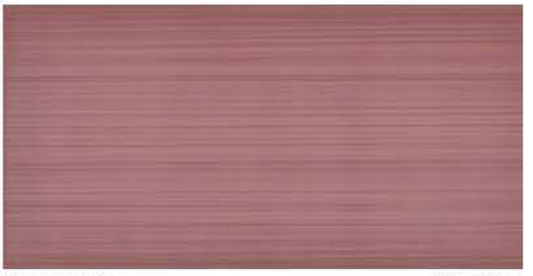
750L097 7x50cm
Mosaico Allegra Pistaccio

S
A
GA
GHA
PEI 3

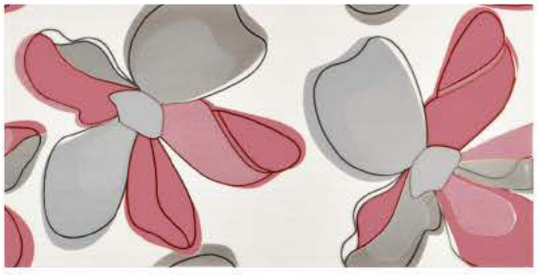
Allegra Grigio 33x33cm

PEI 4

Allegra Pistaccio 33x33cm



Allegra Lila 25x50cm



2550C121 25x50cm
Gardenia

2550C096 25x50cm
Fantasia Lila

825L096 8x25cm
Fantasia Lila

725L097 7x25cm
Mosaico Allegra Lila

850L096 8x50cm
Fantasia Lila

750L097 7x50cm
Mosaico Allegra Lila

Allegra Lila 33x33cm

Neox zidne i podne pločice / wall and floor tiles 25X50, 33X33 cm

Neox Dark 25x50cm

Neox Almond 25x50cm

2550C094 25x50cm
Regina Dark

2550C094 25x50cm
Regina Almond

825L094 8x25cm
Regina Dark

825L094 8x25cm
Regina Almond

850L094 8x50cm
Regina Dark

850L094 8x50cm
Regina Almond

750L095 7x50cm
Aura Dark

750L095 7x50cm
Aura Almond

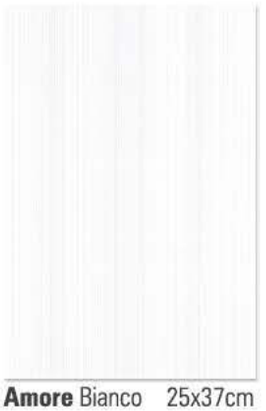
Neox Dark 33x33cm

Neox Almond 33x33cm

Amore zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

Amore Rosso 25x37cm

Amore Nero 25x37cm



Amore Bianco 25x37cm

S

GA

GHA

325L043P 3X25cm
Compton Rosso

325L043P 3X25cm
Compton Nero

2537C081 25X37cm
Dalia

2537C122 25X37cm
Camelia Rosso

525L052 5X25cm
Gioco Nero

825L054P 8X25cm
Flutto Nero Extra

637L054P 6X37cm
Flutto Rosso

637L055P 6X37cm
Grazia Rosso

637L054P 6X37cm
Flutto Nero

637L055P 6X37cm
Grazia Nero

PEI 3

Amore Rosso 33x33cm

GA

PEI 2

Amore Nero 33x33cm

Amore Bianco 33x33cm

M

A

GA

GHA

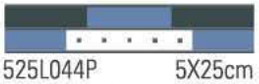
PEI 4

Amore AMORE ROSSO, AMORE NERO, AMORE BIANCO, AMORE LILA, AMORE BLU 25X37, 33X33 CM

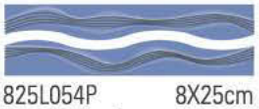
S
GA
GHA

Amore Blu 25x37cm

325L043P 3X25cm
Compton Blu



525L044P 5X25cm
Compton Blu



825L054P 8X25cm
Flutto Blu Extra

725L088 7X25cm
Amore Flowery

2537C088 25x37cm
Amore Flowery

637L054P 6X37cm
Flutto Blu

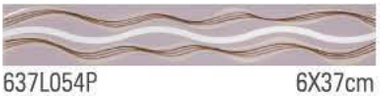
637L055P 6X37cm
Grazia Blu

737L088 7X37cm
Amore Flowery

Amore Lila 25x37cm

325L043P 3X25cm
Compton Lila

2537C122 25x37cm
Camelia Blu



637L054P 6X37cm
Flutto Lila

637L055P 6X37cm
Grazia Lila

M
A
GA
GHA
PEI 3

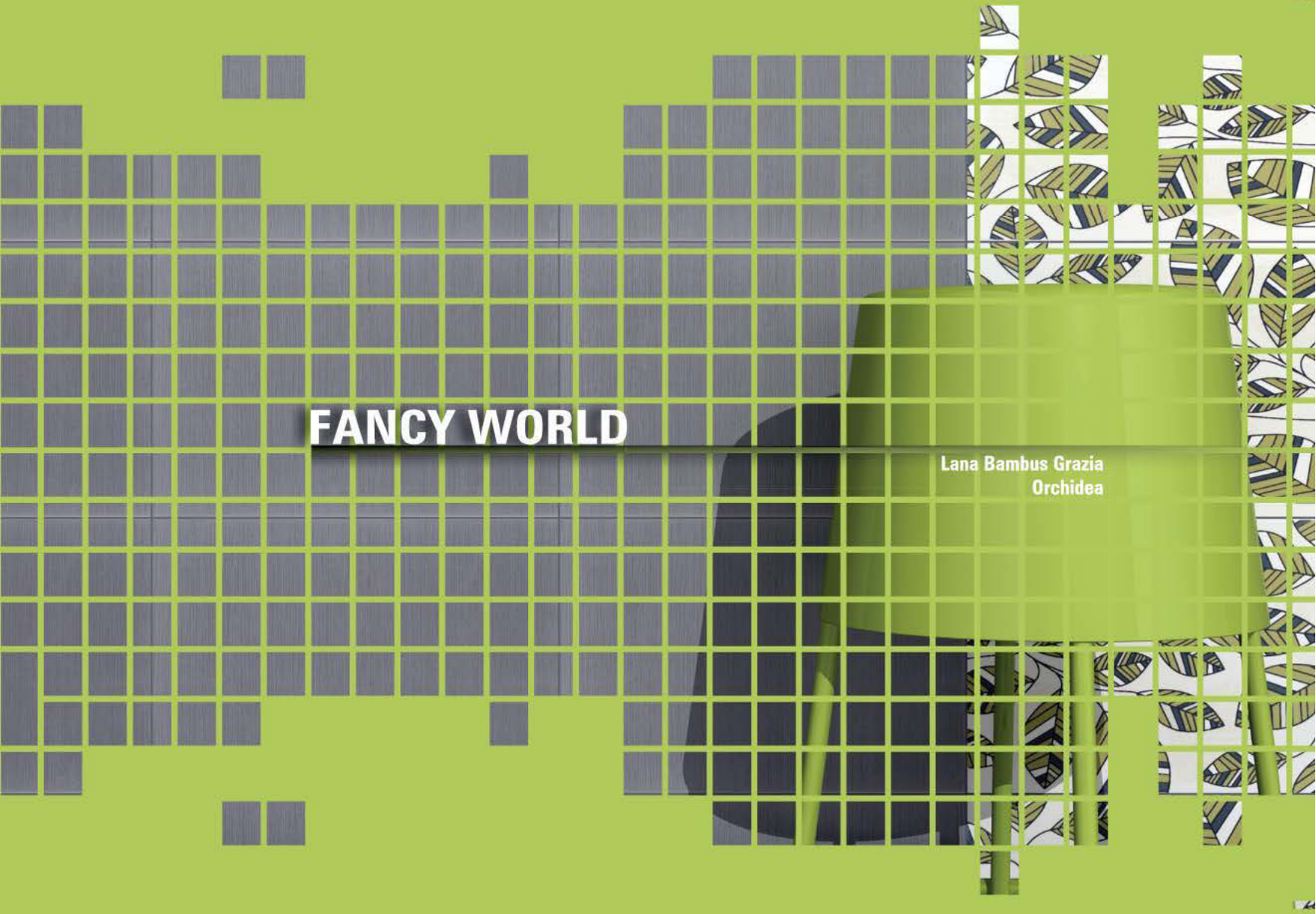
Amore Blu 33x33cm

PEI 4

Amore Lila 33x33cm

FANCY WORLD

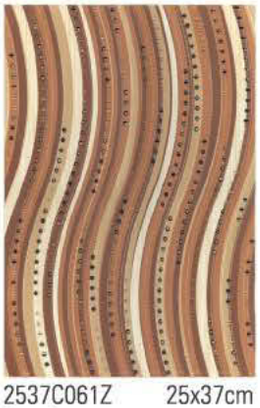
Lana Bambus Grazia
Orchidea



Bambus BAMBUS BEIGE, BAMBUS DARK 25X37, 33X33 CM

M
GA
GHA

Bambus Beige 25x37cm



2537C061Z 25x37cm
Pearl

1237L061Z
12x37cm
Pearl

725L061Z 7X25cm
Pearl

537L058P 5x37cm
Wave

537L059P 5x37cm
Spots

2537C123 25x37cm
Spring

725L123 7,5x25cm
Spring

737L123 7,5x37cm
Spring

GA

Bambus Dark 25x37cm

225L073P 2x25cm
Sugar Platinum

225L073Z 2x25cm
Sugar Gold

525L058P 5x25cm
Wave

525L059P 5x25cm
Spots

525L052 5x25cm
Gioco Marrone

625L066Z 6x25cm
Bambus Natura

637L066Z 6X37cm
Bambus Natura

M
A
GA
GHA
PEI 4

Bambus Beige 33x33cm

GA
PEI 2

Bambus Dark 33x33cm

2537**Mozaik** 25x37cm
Bambus Beige

2537**Mozaik** 25x37cm
Bambus Dark

Natura zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

Natura Crema 25x37cm

Natura Arancio 25x37cm

Natura Noce 25x37cm

625L071P 6x25cm
Canna

625L070P 6x25cm
Linea

525L052 5x25cm
Gioco Marrone

637L071P 6x37cm
Canna

637L070P 6x37cm
Linea

225L073P 2x25cm
Sugar Platinum

225L073Z 2x25cm
Sugar Gold

PEI 4

Natura Crema 33x33cm

PEI 4

Natura Arancio 33x33cm

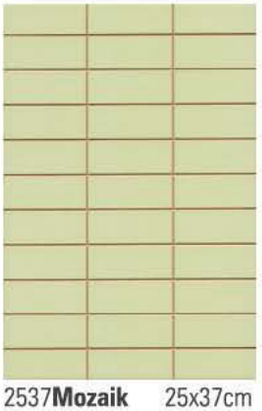
Natura Noce 33x33cm

Lana zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

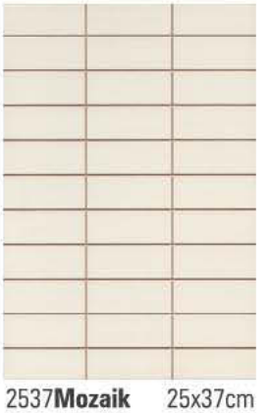
Lana Pistaccio 25x37cm

Lana Crema 25x37cm

2537C087 25X37cm
Bosco Pistaccio



2537**Mozaik** 25x37cm
Lana Pistaccio



2537**Mozaik** 25x37cm
Lana Crema

725L087 7.5X25cm
Bosco Pistaccio

625L077P 6X25cm
Allea Pistaccio

737L087 7.5x37cm
Bosco Pistaccio

637L077P 6x37cm
Allea Pistaccio

Lana Pistaccio 33x33cm

Lana Crema 33x33cm

Lana LANA CREMA, LANA GRIGIO, LANA PISTACCIO 25X37, 33X33 CM

M
GA
GHA

Lana Grigio 25x37cm

2537**Mozaik** 25x37cm
Lana Grigio

625L077P 6X25cm
Allea Grigio

637L077P 6x37cm
Allea Grigio

M
A
R9
GA
GHA
PEI 2

Lana Grigio 33x33cm

Grazia GRAZIA UNI, GRAZIA BIANCO, GRAZIA NERO 25X37, 33X33 CM

Grazia Bianco 25x37cm

Grazia Nero 25x37cm

Grazia Uni 25x37cm

2537C072P 25X37cm
Henna Bianco

225L073Z 2x25cm
Sugar Gold

625L072P 6X25cm
Henna Bianco

637L072P 6x37cm
Henna Bianco

2537C072P 25X37cm
Henna Nero

625L075P 6x25cm
Seta Nero

625L072P 6x25cm
Henna Nero

637L072P 6x37cm
Henna Nero

2537C072P 25X37cm
Henna Silver

225L073P 2x25cm
Sugar Platinum

625L072P 6x25cm
Henna Silver

637L072P 6x37cm
Henna Silver

Grazia Bianco 33x33cm

Grazia Nero 33x33cm

Orchidea ORCHIDEA BIANCO, ORCHIDEA NERO 25X37, 33X33 CM

Orchidea 25x37cm
Bianco

Orchidea Nero 25x37cm

2537C082P 25X37cm
Orchidea Platinum

325L083 3X25cm
Colori Nero

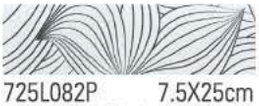
337L083 3x37cm
Colori Nero

625L092P 6X25cm
Viva Silver

637L092P 6x37cm
Viva Silver

625L069 6X25cm
Cord Nero

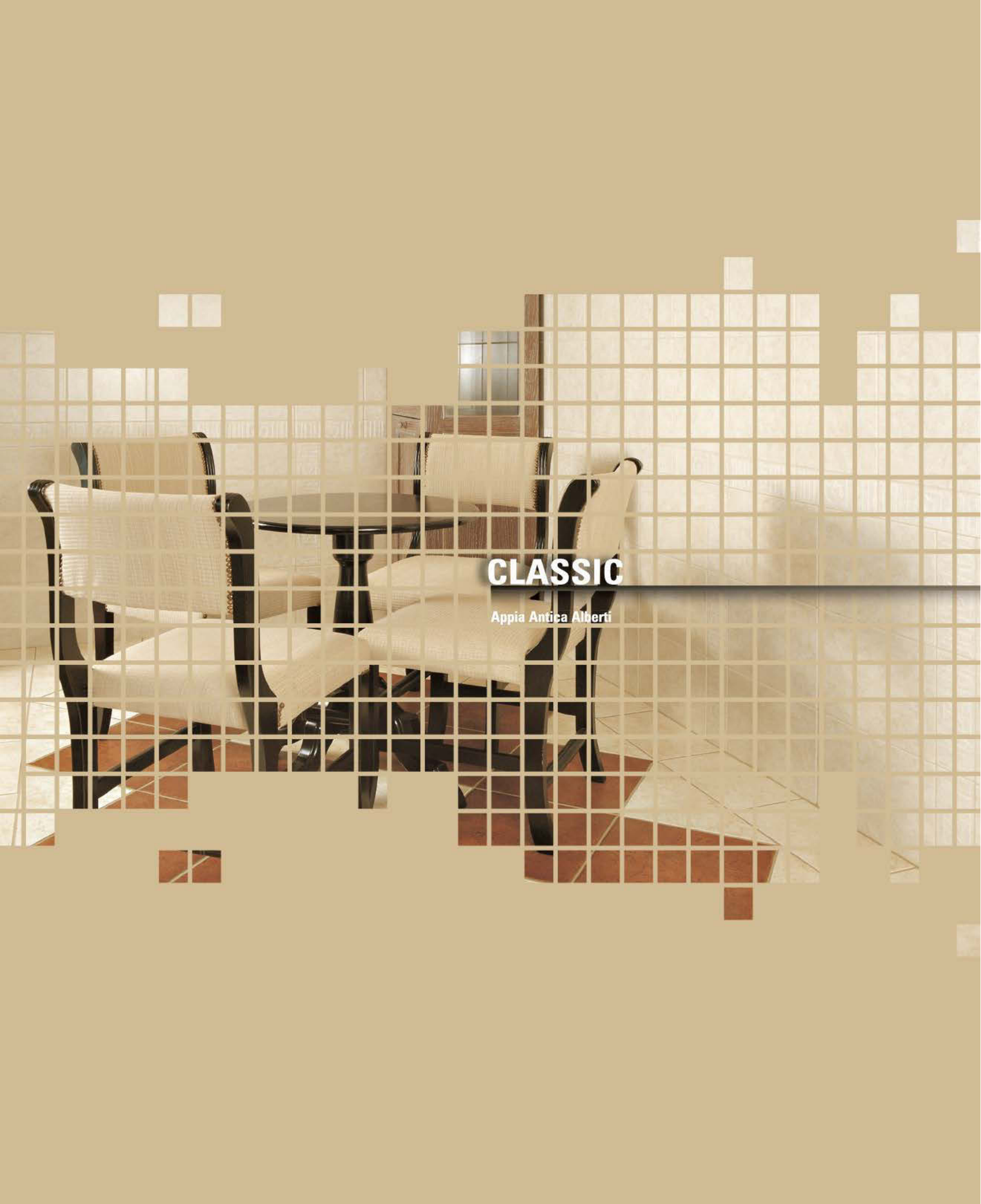
637L069 6x37cm
Cord Nero



725L082P 7.5X25cm
Orchidea Platinum

737L082P 7.5x37cm
Orchidea Platinum

Onda Nero 33x33cm



CLASSIC

Appia Antica Alberti

Appia Antica

zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

Appia Antica 25x37cm

Mozaik Appia Antica 25x37cm

2537C037 25X37cm
Beige Rustic

2537C036 25X37cm
Appia Frutta

825L036 8X25cm
Appia Frutta

825L037 8X25cm
Beige Rustic

825L025 8X25cm

625L051B 6X25cm
Appia Antica

825L042B 8X25cm
Appia Antica

165165U111
Beige
16.5x16.5cm

165330B111
Beige
16.5x33cm

165165U112
Beige
16.5x16.5cm

165330B112
Beige
16.5x33cm

Appia Antica 33x33cm

Alberti

zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

Classic

Alberti Crema 25x37cm

725L065Z 7X25cm
Gold

Alberti Rosso 25x37cm

825L015 8X25cm
Rosso

525L056P 5X25cm
Alberti Rosso

537L056P 5x37cm
Alberti Rosso

Alberti Crema Extra 33x33cm

Alberti Rosso Extra 33x33cm

PROJEKTNE PLOČICE
PROJECT TILES

Imperia Universo Bianca

zidne i podne pločice / wall and floor tiles 25X37, 33X33 cm

Universo / Imperia / Bianca

Universo / Imperia / Bianca UNIVERSO, IMPERIA, BIANCA 25X37, 33X33 CM

S

GA

GHA

Universo 25x37cm

Imperia 25x37cm

Bianca 25x37cm

825L015
Universo 8x25cm

825L015 8x25cm
Imperia

M

A

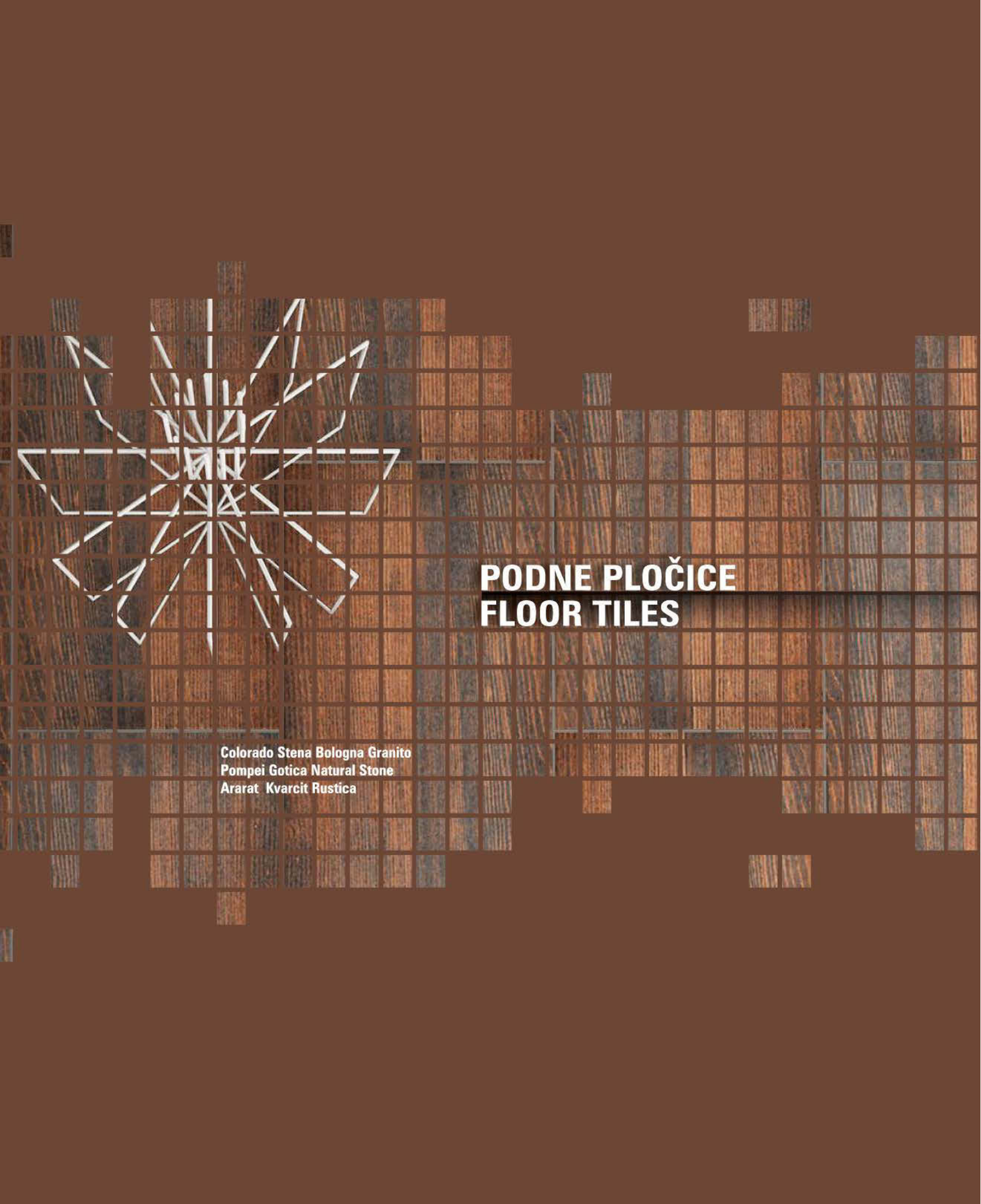
GA

GHA

PEI 4

Universo 33x33cm

Imperia 33x33cm



PODNE PLOČICE
FLOOR TILES

Colorado Stena Bologna Granito
Pompei Gotica Natural Stone
Ararat Kvarcit Rustica

Bologna podne pločice / floor tiles 33X33 cm

M

A

GA

GHA

PEI 2

Bologna 33x33cm

165330B101
Bordo - Bež
16.5x33cm

165165U101
Bordo - Bež
16.5x16.5cm

165165U105
Pompei
16.5x16.5cm

165330B105
Pompei
16.5x33cm

Pompei 33x33cm

M

B

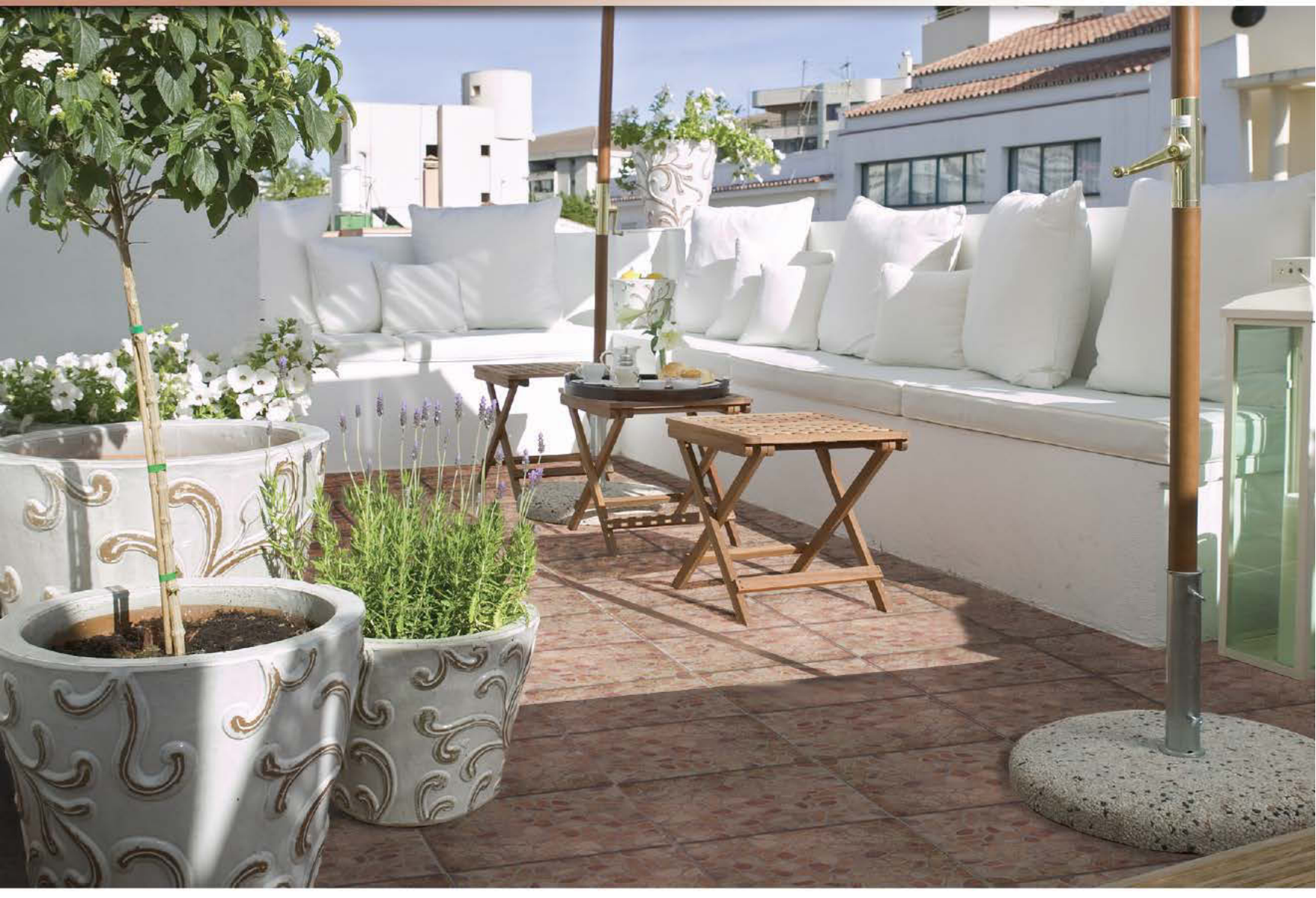
R10

GA

GHA

PEI 3

Colorado podne pločice / floor tiles 33X33 cm



M

C

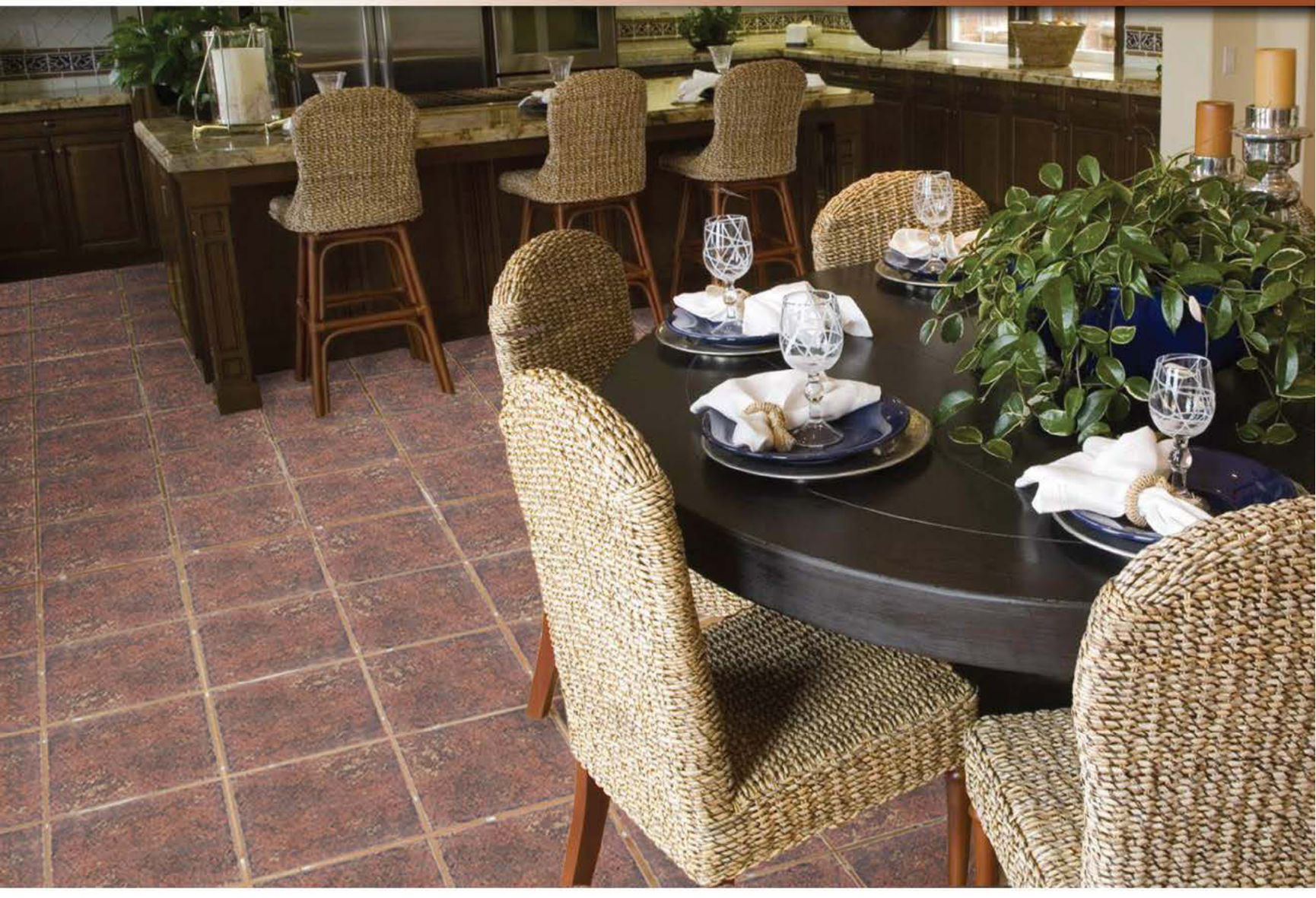
R12

GA

GHA

PEI 5

Colorado Uni 33x33cm



Gotica Rosso 33x33cm

M

B

R10

GA

GHA

PEI 3

Natural Stone

podne pločice / floor tiles 33X33 cm

M

C

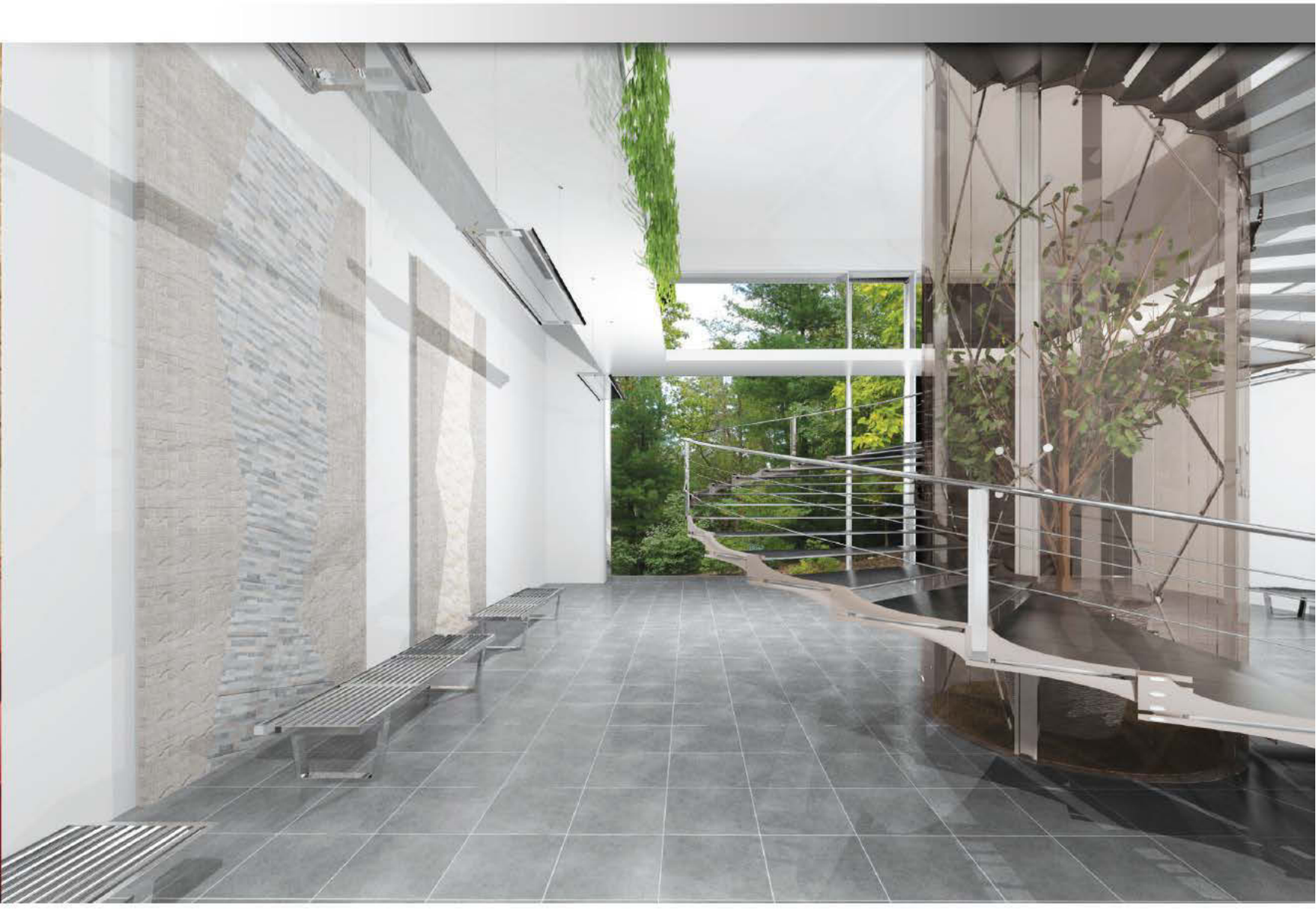
R12

GA

GHA

PEI 5

Natural Stone 33x33cm



Granito Grigio 33x33cm

PEI 3

Granito Beige 33x33cm

M

A

GA

GHA

PEI 4

Stena podne pločice / floor tiles 33X33 cm

M

C

R11

GA

GHA

PEI 4

Stena 33x33cm

Ararat Uni Siva 33x33cm

Ararat Siva 33x33cm

Kvarcit podne pločice / floor tiles 40X40 cm

M

B

R11

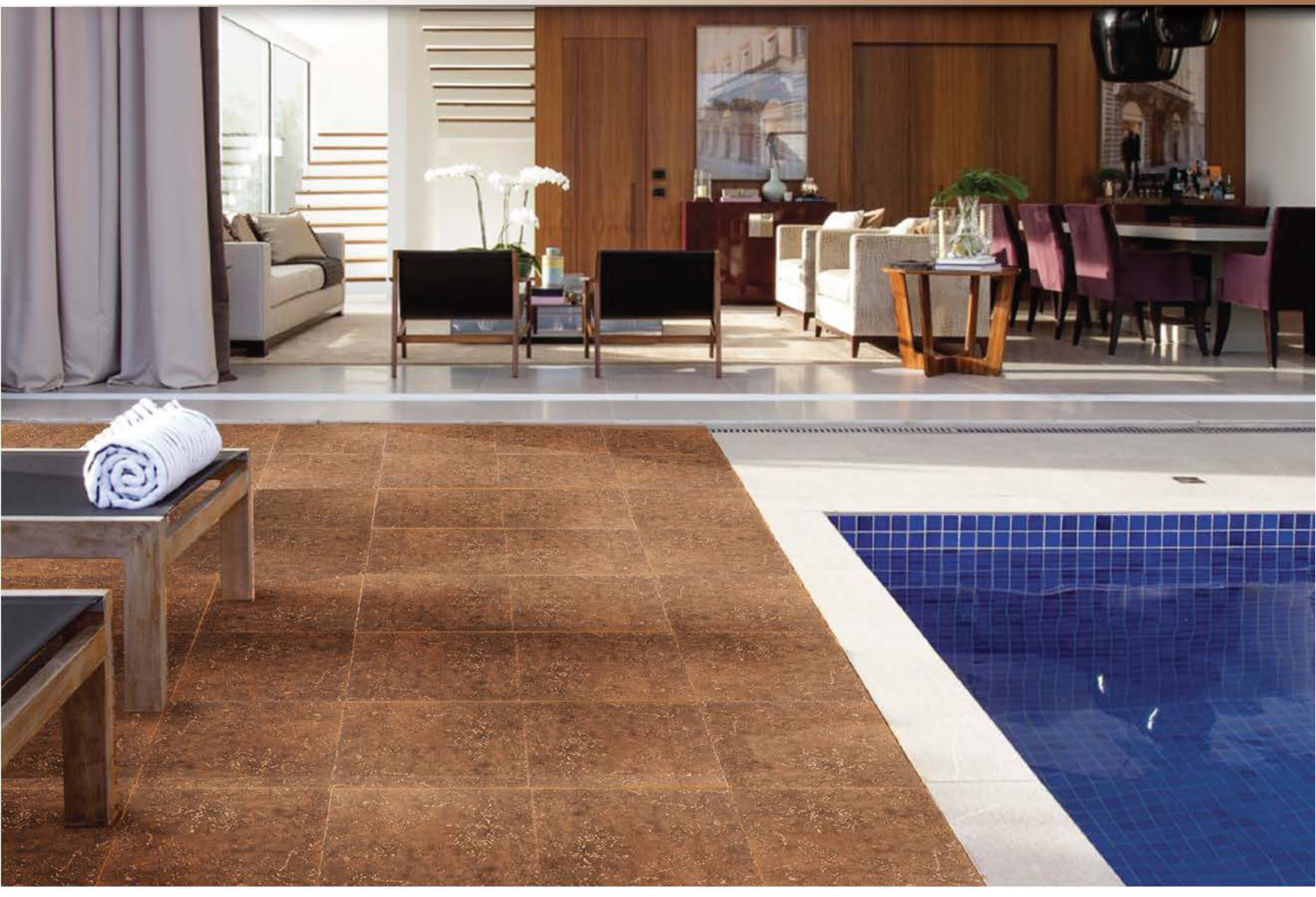
GA

GHA

PEI 4

Kvarcit Beige 40x40cm

Kvarcit Grey 40x40cm



Rustica Sabbia 40x40cm

Rustica Marron 40x40cm

M

PEI 4

OBJAŠNJENJE SIMBOLA
SIMBOL EXPLANATION

- Zidne pločice
  Wall tiles
- Podne pločice
  Floor tiles
- Otporne na niske temperature
  Low temperature resistance
- GA — Otpornost na hemikalije u domaćinstvu
  Resistance to household chemicals
- GHA — Otpornost na jake kiseline
  Resistance to strong acids
- PEI 2 — Otpornost na habanje
  Resistance to abrasion
- A — Protiv kliznost površine (voda)
  Anti - slip (water)
- R9 — Protiv kliznost površine (ulje)
  Anti - slip (oil)
- Otpornost na mrlje
  Stain resistance
- M — Mat površina
  Mat surface
- S — Sjajna površina
  Glossy surface

WITH TESTING CERTIFICATE OF

CENTRO CERAMICO BOLOGNA

TEHNIČKE KARAKTERISTIKE
TECHNICAL CHARACTERISTICS

TEHNIČKE KARAKTERISTKE

„Keremika Kanjiža" doo iz Kanjiže proizvodi suvo presovane, jednom pečene podne i zidne keramičke pločice (takozvanu monokoturu i monoporozu) kao i ukrasnu galanteriju. Podne pločice su otporne na mraz, pogodne su za postavljanje spolja. Naše keramičke pločice u svim segmentima ispunjavaju zahteve harmonizovanog evropskog standarda SRPS EN 14411.

STANDARDI

Od decembra 2005. godine primenjuje se standard SRPS EN 14411, objavljen uz dozvolu Evropskog komiteta za standardizaciju CEN. Ovaj standard je identičan međunarodnom standardu EN 14411 koji se obavezno primenjuje u svim članicama evropske unije. CE-znak je simbol usaglašenosti proizvoda, izrađenog u skladu sa harmonizovanim standardom koji ispunjava bitne zahteve direktive za građevinske proizvode.
SRPS EN 14411 Keramičke pločice – Definicije, klasifikacija, karakteristike i obveležavanje – Definiše termine i utvrđuje klasifikacije, karakteristike i zahteve za obeležavanje keramičkih pločica najboljeg komercijalnog kvaliteta (prva klasa).
Prema standardu keramičke pločice se uvrstavaju u grupe prema načinu proizvodnje i upijanju vode.
Podela prema načinu proizvodnje:
Grupa A Vučene (ekstrudirane) keramičke pločice
Grupa B Suvo presovane pločice
Grupa C Pločice proizvedene drugim postupkom
Podela prema upijanju vode:
Ia Upijanje vode manje od 0,5%
Ib Upijanje vode od 0,5 do 3%
IIa Upijanje vode od 3 do 6%
IIb Upijanje vode od 6 do 10%
III Upijanje vode preko 10%
Podela prema prirodi vidne površine:
Glazirane (GL)
Neglazirane (UGL)
Proizvodi "Keramika Kanjiža" dele se u sledeće grupe:
Podne pločice Grupa B Ib
Zidne pločice Grupa B III
U prilozima standarda SRPS EN 14411 od A do L, za svaku grupu proizvoda su dati minimalni tehnički zahtevi u pogledu mera i kvaliteta vidne površine kao i fizičkih i hemijskih svojstva.
Grupa B Ib Prilog H
Grupa B III Prilog L

Metode ispitivanja korišćene za određivanje karakteristika proizvoda su opisane u standardima SRPS ISO 10545.
SRPS ISO 10545-1 Uzimanje uzoraka i osnove za prihvatanje – Ovaj standard utvrđuje broj uzoraka koje treba proveriti iz partije i maksimalni broj dozvoljenih grešaka.
SRPS ISO 10545-2 Određivanje mera i kvaliteta vidne površine – Ovim standardom utvrđuje se metoda za određivanje mernih karakteristika (dužina, širina, debljina, pravost stranica, odstupanje od pravog ugla, ravnost površine) i kvalitet površine keramičkih pločica.
SRPS ISO 10545-3 Određivanje upijanja vode, prividne poroznosti, prividne relativne zapreminske mase i zapreminske mase – Ovim ispitivanjem se utvrđuje metoda za određivanje upijanja vode i prividne poroznosti keramičkih pločica.
SRPS ISO 10545-4 Određivanje modula loma pri savijanju i čvrstoće pri lomu – Utvrđuje metodu ispitivanja za određivanje čvrstoće pri lomu. Dobijeni podatak ukazuje na opterećenje koju pločica može podneti.
SRPS ISO 10545-7 Određivanje otpornosti glaziranih pločica prema površinskom habanju – PEI klasifikacija – Ocenjuje otpornost glazure prema površinskom habanju. Postupak se vrši rotiranjem sredstva za habanje i ocenjivanjem delovanja habanja, vizuelnim poređenjem pločica izloženih habanju i pločica koje nisu bile izložene habanju. Ocenjivanje proizvoda se vrši od 0 do 5, u zavisnosti od broja obrtaja rotirajućeg sredstva i pojave oštećenja (5 je najviša klasa otpornosti glaziranih pločica prema površinskom habanju).

PEI - klasifikacija glaziranih podnih pločica u odnosu na njihovu otpornost prema habanju
PEI 0 Glazirane pločice u ovoj klasi ne preporučuju se za korišćenje na podovima.
PEI 1 Prikladno za pokrivanje podnih površina u kojima se hoda isključivo u obući sa mekanim đonovima ili bosonog, bez nečistoća koje grebu podnu površinu (na primer stambena kupatila i spavaće sobe bez direktnog pristupa spolja).
PEI 2 Prikladno za pokrivanje podnih površina u kojima se hoda u mekanoj ili običnoj obući sa uobičajeno malim količinama nečistoće koja grebe površinu (na primer sobe i prostori za dnevni boravak u kućama i stanovima sa izuzetkom kuhinja, ulaza i prostora u kojima je veliki promet).
PEI 3 Prikladno za pokrivanje podnih površina gde se često hoda u običnoj obući sa malo nečistoće koja grebe pod (na primer stambene kuhinje, holovi, hodnici, balkoni, terase). Ne odnosi se na izuzetnu obuću, na primer čizme okovane ekserima.
PEI 4 Prikladno za podove tamo gde se odvija uobičajen promet sa nešto više nečistoće koja grebe pod (na primer ulazi, javne kuhinje, hoteli, izložbeni i prodajni prostori).
PEI 5 Prikladno za podove sa stalnim velikim prohodnim opterećenjem i prisutnom prljavštinom koja grebe (na primer javne površine kao što su trgovački centri,utrašnje aerodromske prostorije, hotelska predvorja i primena u industriji).

Ova klasifikacija važi za primenu pod uobičajenim uslovima.
Informacija o otpornosti podnih pločica prema habanju navedena je pored slike podnih pločica.

SRPS ISO 10545-8 Određivanje linearnog termičkog širenja – Određuje se koeficijent linearnog termičkog širenja za opseg od sobne temperature do 100 °C. Vrednost pokazuje u kojoj meri će se postavljena pločica širiti usled temperaturnih promena. Ovaj podatak treba da se uzme u obzir prilikom određivanja debljine fuge između pločica.
SRPS ISO 10545-9 Određivanje otpornosti prema temperaturnom šoku – Pločica se izlaže nagloj promeni temperature i nakon toga se proverava pojava oštećenja.
SRPS ISO 10545-10 Određivanje širenja vlaženjem – Ovim standardom se utvrđuje metoda za određivanje širenja keramičkih pločica vlaženjem. Podatak pomaže prilikom dimenzionisanja fuge između pločica.
SRPS ISO 10545-11 Određivanje otpornosti prema vlasavosti glaziranih pločica – Vrši se provera pojave pukotina na površini glazirane pločice nakon tretiranja sa parom na pritisku od 500 kPa i temperaturi od 159 °C, dva sata u autoklavu.
SRPS ISO 10545-12 Određivanje otpornosti prema mrazu – Po ovoj metodi pločice se izlažu smrzavanju i otapanju u temperaturnom opsegu od -5 °C do +5 °C, najmanje 100 ciklusa. Ovo ispitivanje simulira ponašanje proizvoda u spoljašnjim klimatskim uslovima.
SRPS ISO 10545-13 Određivanje otpornosti prema hemikalijama – Ovim ispitivanjem se utvrđuje otpornost pločica prema dejstvu hemikalija za domaćinstvo, soli u vodi bazena za plivanje, kiselina, baza i otpornost prema dejstvu olovke HB tvrdoće. U zavisnosti od vrste hemikalija i otpornosti pločice se dele u sledeće klase:
Hemikalije za domaćinstvo i soli u vodi bazena za plivanje:
GA bez vidljivih efekata
GB male promene u izgledu ili ako pločice nisu prošle test olovke HB tvrdoće
GC značajne promene
Kiseline i baze (malih koncentracija)
GLA bez vidljivih efekata
GLB male promene u izgledu ili ako pločice nisu prošle test olovke HB tvrdoće
GLC značajne promene
Kiseline i baze (velikih koncentracija)
GHA bez vidljivih efekata
GHB male promene u izgledu ili ako pločice nisu prošle test olovke HB tvrdoće
GHC značajne promene
SRPS ISO 10545-14 Određivanje otpornosti prema stvaranju mrlja – Vidna površina pločice se dovodi u kontakt sa sredstvom za stvaranje mrlja, nakon odstranjivanja vrši se klasifikacija. Klasifikacija se vrši od 5 do 1 u zavisnosti od lakoće uklanjanja mrlje, pri čemu se kod klase 5 najlakše uklanja mrlja.

DIN 51130:2004-06 Određivanje antikliznih svojstava za podne pločice

Za veće podne površine, industrijske i komercijalne namene poželjno je da je koeficjenat trenja viši od onih koji se koristi u kućama.
DIN 51130:2004-06 Određivanje antikliznih svojstava za podne pločice

Za veće podne površine, industrijske i komercijalne namene poželjno je da je koeficjenat trenja viši od onih koji se koristi u kućama.
Nemački standard DIN 51130:2004-06 definiše postupak i služi za testiranje i klasificiranje anti kliznih svojstava podnih obloga koji su predviđeni za korišćenje u radnim prostorima i područjima gde je prisutna opasnost od klizanja. Prihvaćeni ugao se utvrđuje na podnoj oblozi premazanoj sa sredstvom za podmazivanje (ulje) a osoba koja sprovodi kontrolu sa kontrolnim cipelama kreće se napred - nazad po kontrolisanoj podnoj oblozi koja se počinje naginjati od horizontalnog stanja i nagib raste do prihvaćenog ugla tj.ugla pri kom kontrolor dostiže granicu sigurnog hodanja. Prihvaćeni ugao služi za ocenu stepena otpornosti na klizanje.

PRIHVAĆENI UGAO:	KLASA OTPORNOSTI NA KLIZANJE:	PREPORUČUJE SE:
6° do 10°	R 9	Ulazi u kuće dnevni boravak…
Preko 10° do 19°	R 10	Hodnici, prodavnice, radionice…
Preko 19° do 27°	R 11	Terase, balkoni…
Preko 27° do 35°	R 12	Stepeništa, gazišta u vrtu…
Preko 35°	R 13	Oblasti sa specijalnim zahtevima

DIN 51097:02.80 Utvrđivanje karakteristika za sprečavanje klizavosti

U uslovima vlažnosti, na gazištima podnih obloga koje se koriste u kupatilu, svlačionicama, sanitarnim čvorovima i sličnim prostorijama, ocenjuju se karakteristike podnih obloga po ovom standardu.
Tokom izvođenja postupka kontinualno i jednolično se nanosi tečnost na test podnu oblogu koja se počinje naginjati od horizontalnog stanja i nagib raste do prihvaćenog ugla tj.ugla pri kom kontrolor dostiže granicu sigurnog hodanja. Osoba koja sprovodi kontrolu kreće se napred - nazad po kontrolisanoj podnoj oblozi bosih nogu. U zavisnosnosti od postignutog ugla nagiba test obloge se mogu svrstati u sledeće grupe:

SREDNJA VREDNOST NAGIBA UGLA:	KLASA OTPORNOSTI NA KLIZANJE:	PREPORUČUJE SE:
≥ 12°	A	Kupatila
≥ 18°	B	Svlačionice, sanitarni čvor…
≥ 24°	C	Oblasti sa specijalnim zahtevima

Informacija o otpornosti podnih pločica prema klizanju navedena je pored slike podnih pločica, a odnosi se samo na one pločice koje zadovoljavaju klasu otpornosti na klizanje (na ulje ili vodu).

SRPS U.F2.011 Završni radovi u građevinarstvu – Izvođenje keramičarskih radova – Standard utvrđuje postupak za oblaganje zidova, podova keramičkim pločicama u unutrašnjosti objekta i spolja.

PREPORUKE PRILIKOM UGRADNJE

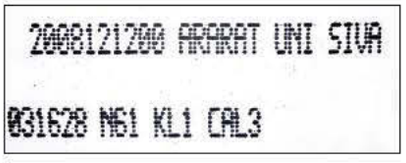
- Pre ugradnje pločice treba uroniti u vodu radi boljeg prijanjanja za podlogu.
- Shodno standardu SRPS U.F2.011 pločice obavezno postaviti sa fugom. Minimalna fuga za zidne pločice je 3 mm, a za podne pločice je 4 mm.
- Podloga za postavljanje pločica treba da bude suva (ne sveže malterisana) i bez strukturnih pukotina.
- Prilikom kupovine pločica obavezno obratiti pažnju na oznaku kalibra i nijanse. U jednoj prostoriji postavljati isključivo pločice iste oznake kalibra i nijanse.
- Za pločice rustikalnog tipa karakteristična je razlika u nijansi. Pre postavljanja pločica preporučljivo je slaganje nekoliko m² kombinovanjem nijansi prema ukusu kupca.

IDENTIFIKACIJA PROIZVODA NA KUTIJAMA I NA PALETAMA

U procesu automatskog pakovanja keramičke pločice se pakuju u kartonsku ambalažu na koju industrijski štampač štampa osnovne podatke identifikacije proizvoda.
U prvom redu štampa se: datum, identifikacioni broj klasera i ime proizvoda. U drugom redu štampa se: broj radnog naloga, klasa proizvoda, nijansa proizvoda i kaliber odnosno dimenzija za podne pločice:
Svaka paleta gotovog proizvoda sadrži bar-cod, pomoću koga se pločice identifikuju.

ZIDNE PLOČICE – MONOPOROZA
SRPS EN 14411, grupa B III, prilog L

Osobina	Metoda ispitivanja	Tolerancija	
		SRPS EN 14411	KK
Dužina i širina	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Debljina	SRPS ISO 10545-2	± 10,0 %	± 2,5 %
Odstupanje od pravog ugla	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Ravnost stranica	SRPS ISO 10545-2	± 0,3 %	± 0,2 %
Ravnost površine	SRPS ISO 10545-2	+ 0,5 %/- 0,3 %	+ 0,25 % /- 0,1 %
Upijanje vode	SRPS ISO 10545-3	> 10,00 %	> 14,00 %
Čvrstoća pri lomu	SRPS ISO 10545-4	> 600 N	> 750 N
Modul loma pri savijanju	SRPS ISO 10545-4	> 12 N/mm²	> 19 N/mm²
Otpornost prema habanju	SRPS ISO 10545-7		
Koeficijent linearnog termičkog širenja	SRPS ISO 10545-8	Postoji metoda ispitivanja	7×10^{-6} K^{-1}
Otpornost prema temperaturnom šoku	SRPS ISO 10545-9	Postoji metoda ispitivanja	Odgovara
Otpornost prema vlasavosti	SRPS ISO 10545-11	Zahteva se	Odgovara
Otpornost prema mrazu	SRPS ISO 10545-12		
Otpornost prema hemikalijama u domaćinstvu	SRPS ISO 10545-13	Najmanje GB	GA
Otpornost prema stvaranju mrlja	SRPS ISO 10545-14	Najmanja klasa 3	Klasa 5



PODNE PLOČICE - MONOKOTURA
SRPS EN 14411, grupa B Ib, prilog H

Osobina	Metoda ispitivanja	Tolerancija	
		SRPS EN 14411	KK
Dužina i širina	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Debljina	SRPS ISO 10545-2	± 5,0 %	± 2,5 %
Odstupanje od pravog ugla	SRPS ISO 10545-2	± 0,6 %	± 0,3 %
Ravnost stranica	SRPS ISO 10545-2	± 0,5 %	± 0,2 %
Ravnost površine	SRPS ISO 10545-2	± 0,5 %	+ 0,2 / - 0.1 %
Kvalitet površine	SRPS ISO 10545-2	min 95% bez vidljivog oštećenja	
Upijanje vode	SRPS ISO 10545-3	< 3,0 %	< 2,80 %
Čvrstoća pri lomu	SRPS ISO 10545-4	> 1100 N	> 1200 N
Modul loma pri savijanju	SRPS ISO 10545-4	≥ 30 N/mm²	> 40 N/mm²
Otpornost prema habanju	SRPS ISO 10545-7	klasa habanja se deklariše za svaki proizvod	
Koeficijent linearnog termičkog širenja	SRPS ISO 10545-8	Postoji metoda ispitivanja	7×10^{-6} K^{-1}
Otpornost prema temperaturnom šoku	SRPS ISO 10545-9	Postoji metoda ispitivanja	Odgovara
Otpornost prema vlasavosti	SRPS ISO 10545-11	Zahteva se	Odgovara
Otpornost prema mrazu	SRPS ISO 10545-12	Zahteva se	Odgovara
Otpornost prema hemikalijama u domaćinstvu	SRPS ISO 10545-13	Najmanje GB	GA
Otpornost prema stvaranju mrlja	SRPS ISO 10545-14	Najmanje klasa 3	Klasa 5

SPECIFIKACIJA PAKOVANJA PLOČICA I UKRASNE GALANTERIJE

PODNE PLOČICE GRUPE B Ib

PAKOVANJE PODNIH PLOČICA	Redni broj	Format	Debljina pločica (mm)	Komada pločica u kutiji	m^2/kut.	Masa kutije (kg)	Komada kut.na paleti	m^2/pal.	Masa palete (kg)
	1	33 x 33	8,0	14	1,5	26,8	40	60,0	1100,0
	2	40 x 40	8,3	10	1,6	29,5	38	60,8	1150,0
POD - ZID	3	25 x 50	8,3	12	1.5	25.7	42	63.0	1100,0

ZIDNE PLOČICE GRUPE B III

PAKOVANJE ZIDNIH PLOČICA	Redni broj	Format	Debljina pločica (mm)	Komada pločica u kutiji	m^2/kut.	Masa kutije (kg)	Komada kut.na paleti	m^2/pal.	Masa palete (kg)
	1	25 x 37	8,6	14	1,30	19,2	54	70,20	1060,0
	2	25 x 37	7.9	16	1.48	19.5	54	79.92	1080.0
	3	25 x 50	9.2	12	1.50	24.4	36	54,00	890,0

UKRASNA GALANTERIJA

PAKOVANJE CENTRALNIH DEKORA I MOZAIKA	Redni broj	Format	Komada u kutiji	Masa kutije (kg)	Komada kutija na paleti	Masa palete (kg)
	1	2537C	14	20,1	45	925,0
	2	2537M	14	18,9	45	870,0
	3	2050C	12	24,198	30	750,0

PAKOVANJE LISTELA	Redni broj	Format	Komada u kutiji	Masa kutije (kg)	Komada kutija na paleti	Masa palete (kg)
	1	225L	56	4,4	88	410,0
	2	325L	42	4,9	88	450,0
	3	325L	56	6,5	77	520,0
	4	425L	28	4,7	88	440,0
	5	525L	28	5,3	77	430,0
	6	537L	28	7,7	56	450,0
	7	625L	28	6,5	77	525,0
	8	637L	28	9,8	56	570,0
	9	725L	14	4,1	88	380,0
	10	737L	14	5,5	56	330,0
	11	825L	14	4,7	88	430,0
	12	837L	14	6,6	56	395,0
	13	1237L	14	9,4	56	550,0
	14	450L	22	7,3	60	460,0
	15	550L	11	4,5	60	290,0
	16	650L	11	5,4	60	340,0
	17	750L	11	6,6	60	415,0
	18	850L	11	7,3	60	455,0

PAKOVANJE BORDURA I UGAONIH ELEMENATA	Redni broj	Format	Komada u kutiji	Masa kutije (kg)	Komada kutija na paleti	Masa palete (kg)
	1	165330B	14	13,2	70	945,0
	2	100330B	14	8,2	70	595,0
	3	165165U	4	1,9	360	705,0

TECHNICAL CHARACTERISTICS

„Keramika Kanjiža" doo from Kanjiža produces dry pressed floor and wall ceramic tiles (so-called monocuttura and monoporosa), as well as decorative accessories. The floor tiles are frost resistant, suitable for installation outside. Our ceramic tiles, in all their segments, meet the requirements of the harmonized European standard SRPS EN 14411.

STANDARDS

Since December 2005, the standard SRPS EN 14411 applies, published with the permission of the European Committee for Standardization CEN. This standard is an identical international standard EN 14411 which is compulsorily applied in all member states of the European Union. The CE-mark is a symbol of product conformity, developed in accordance with the harmonized standard that meets the important requirements of the Construction Products Directive.
SRPS EN 14411 Ceramic tiles – Definition, classification, characteristics and designation – Defines terms and determines classifications, characteristics and requirements for designation of ceramic tiles with the best commercial quality (first class).
According to the standard, the ceramic tiles are classified into groups according to the manner of production and water absorption.
Classification according to the manner of production:
Group A Extruded ceramic tiles
Group B Dry pressed tiles
Group C Tiles produced with a different procedure
Classification according to water absorption:
Ia Water absorption less than 0,5%
Ib Water absorption from 0,5 to 3%
IIa Water absorption from 3 to 6%
IIb Water absorption from 6 to 10%
III Water absorption more than 10%
Classification according to the nature of the visible surface:
Glazed (GL)
Unglazed (UGL)
The products of "Keramika Kanjiža" are divided into the following groups:
Floor tiles Group B Ib
Wall tiles Group B III
In the attachments for the standards SRPS EN 14411 for A to L, for each product group there are given minimal technical requirements in terms of dimensions and quality of visible surfaces, as well as physical and chemical properties.
Group B Ib Prilog H
Group B III Prilog L

Testing methods used for determination of the product characteristics are described in the standards SRPS ISO 10545.

SRPS ISO 10545-1 Sampling and basis for acceptance – This standard determines the number of samples that should be checked from the series and a maximal number of allowed mistakes.
SRPS ISO 10545-2 Determination of dimensions and quality of visible surface – This standard establishes a method for determining the mesurement characteristics (length, width, thickness, flatness of sides, deviation for a right angle, and flatness of the surface) and quality of the surface of ceramic tiles.
SRPS ISO 10545-3 Determination of water absorption, apparent porosity, apparent relative density and bulk density – This testing establishes a method for determination of water absorption and apparent porosity of ceramic tiles.
SRPS ISO 10545-4 Determination of modulus of rupture and fracture strength – Establishes a testing method for determining the fracture strength. Obtained data indicate the load that the tile can bear.
SRPS ISO 10545-7 Determination of surface abrasion resistance of glazed tiles - PEI classification – The glaze resistance to surface abrasion is being determined. The procedure is perfomed by rotation of assets for abrasion and assessment of the abrasion effect, by visual comparison of tiles exposed to abrasion and tiles which were not exposed to abrasion. The product assessment is performed from 0 to 5, depending on the speed of rotation tools and occurence of damages (5 is the highest class of resistance of glazed tiles according to the surface abrasion).

PEI – classification of glazed floor tiles in relation to their abrasion resistance
PEI 0 Glazed tiles in this class are not recommended for application on floors.
PEI 1 Appropriate for covering floor surfaces where people walk only in shoes with soft soles or barefoot, without dirt which scratches the floor surface (for example, residential bathrooms and bedrooms without direct access from outside).
PEI 2 Appropriate for covering floor surfaces where people walk in soft or plain shoes, usually with small quantities of dirt which scratches the surface (for example, rooms and living rooms in houses and apartments, with the exception of the kitchen, the doorway and crowded rooms).
PEI 3 Appropriate for covering floor surfaces where people often walk in plain shoes, with little dirt which scratches the floor (for example, residential kitchens, halls, corridors, balconies, terraces). This does not refer to exceptional footware, for example – studdied boots.
PEI 4 Appropriate for floors with normal movement of people with slightly more dirt which scratches the floor (for example entrances, public kitches, hotels, exibition and retail space).
PEI 5 Appropriate for floors with constant great natural load and presence of dirt which scratches (for example, public surfaces such as commercial centers, airport interior rooms, hotel lobbies and application in industry).

This classification is valid for application in usual conditions.
The information about abrasive resistance of floor tiles is indicated next to the figures of floor tiles.

SRPS ISO 10545-8 Determination of linear thermal expansion – The coefficient of linear thermal expansion is being determined for a range of room temperature up to 100 °C. The value indicates the extent to which the placed tile will expand due to temperature changes. This information should be taken into consideration during the determination of fugue thickness between the tiles.
SRPS ISO 10545-9 Determination of thermal shock resistance – The tiles are exposed to abrupt temperature changes and afterwards the occurence of damages is being checked.
SRPS ISO 10545-10 Determination of moisture expansion – This standard establishes a method for determination of moisture expansion of ceramic tiles. The data help to determine the dimension between tiles.
SRPS ISO 10545-11 Determination of crazing resistance of glazed surfaces – Occurence of cracks on the surface of glazed tiles is performed after treating them with compressed stream at a pressure of 500 kPa and temperature of 159 °C, for two hours in an autoclave.
SRPS ISO 10545-12 Determination of frost resistance – According to this method, the tiles are exposed to freezing and thawing within a temperature range from -5 °C to +5 °C, for at least 100 cycles. This testing simulates the prodcut behavior in external climate conditions.
SRPS ISO 10545-13 Determination of resistance to chemicals – This testing determines the tiles' resistance to the effect of household chemicals, salts in the water of a swimming-pool, acid, base and resistance to the effect of a 'pencil with HB hardness'. Depending on the type of chemicals and resistance of tiles, they are divided in the following classes:
Household chemicals and salts in the water of a swimming-pool
GA with no visible effects
GB small changes in the appearance or if the tiles did not pass the testing with a 'pencil with HB hardness'
GC siginificant changes
Acids and bases (low concentrations)
GLA with no visible effects
GLB small changes in the appearance or if the tiles did not pass the testing with a 'pencil with HB hardness'
GLC siginificant changes
Acids and bases (high concentrations)
GHA with no visible effects
GHB small changes in the appearance or if the tiles did not pass the testing with a 'pencil with HB hardness'
GHC siginificant changes
SRPS ISO 10545-14 Determination of stain resistance – The visible surface of the tiles is exposed to contact with assets that create stains, and classification is performed after removal. The classification is performed from 5 to 1 depending on the ease of removing the stains, whereupon the stains are most easily removed at class 5.

DIN 51130:2004-06 Determination of anti-slip properties for floor tiles

For bigger floor surfaces, industrial and commercial purposes, it is desirable that the friction coefficient is higher than the one used in houses.
The German standard DIN 51130:2004-06 defines the procedure and serves for testing and classification of anti-slip properties of floor coverings which have been stipulated for use in working rooms and areas where danger of slipping exists. The accepted angle is determined on a floor coating with applied lubricated asset (oil) and the person who performs control with control shoes moves forward-backward on the floor coating which is being controlled and which starts to tilt from its horizontal state and the inclination increases up to an accepted angle, i.e. an angle when the controller reaches the boundary of safe walking. The accepted angle is used for assessment of the degree of slip resistance.

ACCEPTED ANGLE:	SLIP RESISTANCE CLASS:	RECOMMENDED IN:
6° do 10°	R 9	House entrances…
Preko 10° do 19°	R 10	Shops,workshops…
Preko 19° do 27°	R 11	Kitchens, laundry rooms…
Preko 27° do 35°	R 12	Great kitchens, dairies…
Preko 35°	R 13	Areas with special requirements

DIN 51097:02.80 Determination of characteristics for prevention of slips

The characteristics of floor coatings according to this standard are assessed in conditions of moisture, on the treads of floor coverings which are used in bathrooms, changing rooms, toilets and similar rooms.
During the execution of the procedure, a liquid is continuously and uniformly applied for testing the floor covering which will start to tilt from its horizontal position and the inclination will grow up to an accepted angle, i.e. an angle when the controller reaches the boundary of safe walking. The person who performs control moves forward-backward on the floor coating which is being controlled, barefoot. Depending on the achieved inclination angle, the tested coverings could be classified in the following groups:

MEAN VALUE OF ANGLE:	SLIP RESISTANCE CLASS:	RECOMMENDED IN:
≥ 12°	A	Bathrooms…
≥ 18°	B	Changing rooms, toilet...
≥ 24°	C	Areas with special requirements

The information about slip resistance of floor tiles is indicated next to the figures of floor tiles. Refers only to tiles that meet the slip resistance class (oil or water). SRPS U.F2.011 Finishing works in structural engineering – Execution of ceramic works – The standard determines a procedure for wall and floor cladding with ceramic tiles inside of premises, as well as outside.

RECOMMENDATIONS DURING INSTALLATION

- Before installing the tiles, they need to be immersed in water for better adhesion with the substrate.
- According to the standard SRPS U.F2.011, the tiles must compulsorily be placed with a fugue. The minimal fugue for wall tiles is 3 mm, and for floor tiles it is 4 mm.
- The substrate for placing the tiles should be dry (not freshly plastered) and without structural cracks.
- When buying the tiles, you must compulsorily pay attention to the designation of the caliber and the shade. Tiles with the same designations of caliber and shade should be put exceptionally in the same room.
- For a rustic type of tiles, the difference in the shade is a characteristic. Before placing the tiles, it is recommendable to match few m2 by combining the shades according to the taste of the customer.

IDENTIFICATION OF PRODUCTS ON BOXES AND ON PALLETS

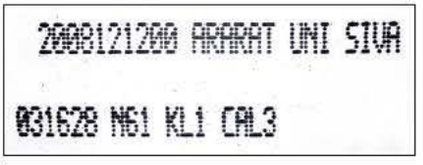
In the process of automatic packaging, the ceramic tiles are packed in a cardboard boxes in which the industrial printer prints the basic data for identifying the product.

The first printed line contains: date, identification number of the classifier and product name. The second printed line contains: number of work order, product class, product shade and caliber, that is, dimension of the floor tiles:

Each pallete of finished product contains a barcode, which helps to identify the tiles.

FLOOR TILES - MONOCOTTURA
SRPS EN 14411, group B Ib, appendix H

Technical characteristics	Norms	Required standards	
		SRPS EN 14411	KK
Length and width	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Thickness	SRPS ISO 10545-2	± 5,0 %	± 2,5 %
Rectangularity	SRPS ISO 10545-2	± 0,6 %	± 0,3 %
Straightness of sides	SRPS ISO 10545-2	± 0,5 %	± 0,2 %
Surface flatness	SRPS ISO 10545-2	± 0,5 %	+ 0,2 / - 0.1 %
Appearance	SRPS ISO 10545-2	min. 95% tiles with no visible defects	
Water absorption	SRPS ISO 10545-3	< 3,0 %	< 2,80 %
Breaking strength	SRPS ISO 10545-4	> 1100 N	> 1200 N
Modulus of rupture (bendingstrength)	SRPS ISO 10545-4	≥ 30 N/mm²	> 40 N/mm²
Wear resistance	SRPS ISO 10545-7	Class of wear resistance is declared for every product	
Coefficient of linear thermal expansion	SRPS ISO 10545-8	Testing method exists	7×10^{-6} K^{-1}
Resistance to thermal shock	SRPS ISO 10545-9	Testing method exists	Conforms
Frost resistance	SRPS ISO 10545-11	Required	Conforms
Crazing resistance	SRPS ISO 10545-12	Required	Conforms
Resistance to chemical products for domestic use	SRPS ISO 10545-13	Minimum GB	GA
Resistance to stains	SRPS ISO 10545-14	Minimum Class 3	Class 5



WALL TILES – MONOPOROSA
SRPS EN 14411, group B III, appendix L

Technical characteristics	Norms	Required standards	
		SRPS EN 14411	KK
Length and width	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Thickness	SRPS ISO 10545-2	± 10,0 %	± 2,5 %
Rectangularity	SRPS ISO 10545-2	± 0,5 %	± 0,3 %
Straightness of sides	SRPS ISO 10545-2	± 0,3 %	± 0,2 %
Surface flatness	SRPS ISO 10545-2	+ 0,5 %/- 0,3 %	+ 0,25 % /- 0,1 %
Water absorption	SRPS ISO 10545-3	> 10,00 %	> 14,00 %
Breaking strength	SRPS ISO 10545-4	> 600 N	> 750 N
Modulus of rupture (bending strength)	SRPS ISO 10545-4	> 12 N/mm²	> 19 N/mm²
Wear resistance	SRPS ISO 10545-7		
Coefficient of linear thermal expansion	SRPS ISO 10545-8	Testing method exists	7×10^{-6} K^{-1}
Resistance to thermal shock	SRPS ISO 10545-9	Testing method exists	Conforms
Crazing resistance	SRPS ISO 10545-11	Required	Conforms
Frost resistance	SRPS ISO 10545-12		
Resistance to chemical products for domestic use	SRPS ISO 10545-13	Minimum GB	GA
Resistance to stains	SRPS ISO 10545-14	Minimum Class 3	Class 5

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