



Sustainable Low-emission Eco-friendly Healthy living

Sopro Bauchemie is committed to meeting the above objectives. The four criteria, which are closely interrelated, are firmly enshrined in its **corporate philosophy**.

To guarantee supreme quality and verify compliance with sustainability principles, Sopro Bauchemie arranges for its processes and products **to be tested and certified by independent, duly qualified institutes**. The following pages present details of the various institutes, their certification criteria and the goals pursued by the company in terms of sustainability, emissions, eco-friendliness and healthy living.

With its wide product portfolio – ranging from screeds, surface fillers and primers to waterproofings, tile adhesives and tile grouts – Sopro Bauchemie offers you sustainable and low-emission **system solutions for virtually any application**. In this brochure, you will find an overview of all our low-emission products from the various segments.





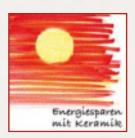


Mitglied der DGNB Deutsche Gesellschaft für Nachhaltiges Bauen German Sustainable Building Council

















SUSTAINABILITY

Acting sustainably: with low-emission products and health-promoting, eco-friendly projects

Sopro Bauchemie honours its responsibilities

Sustainability – always understood as the simultaneous pursuit, with equal priority, of environmental, social and economic goals – is firmly enshrined in Sopro Bauchemie's **corporate philosophy**.

Key planks of its policy include **eco-friendly, resource-saving production** and the **development of low-emission products and solutions**. This, in turn, demands efficient, economical processes along the entire value chain. The central strategic elements are:

- Use of locally sourced, minimum-emission raw materials coupled with an increase in recycling quotas
- √ Product formulation and manufacture involving lowest possible emissions
- ✓ Production at regional plants under safe, eco-efficient conditions
- √ Prioritization of ecologically manufactured and recyclable mono-material packaging or separable multi-material packaging
- √ Provision of large-size containers

At the same time, Sopro also takes systematic measures to address the **social dimension** of sustainability. By focusing on its "Gesundes Unternehmen" ("Healthy Company") project, Sopro looks to create a permanently health-promoting environment. Sopro Bauchemie is a member of the **German Sustainable Building Council** (DGNB) and the **Swiss Minergie*** **Association**.

Many Sopro products can be used to ensure successful DGNB certification. Certified sustainable construction is gaining increasing importance across the whole market. Through the "Healthy Living, Energy Conservation and Finishings Design with Ceramics" initiatives launched by the EUF (Federation of European Tile Fixers' Associations), the ceramics industry and builders' merchants are sharpening their sustainability profile. These areas offer a key potential source of future growth. As an EUF partner, Sopro Bauchemie is actively involved in this process. The American LEED (Leadership in Energy and **Environmental Design) certification system offers** a further framework for building sustainability assessments. LEED ratings are now required by clients in Germany and worldwide. Here too, Sopro's certified, low-emission products score top marks.





LOW-EMISSION AND







* Information sur le niveau d ' émission de substances volatiles dans l'air intérieur, présantant un risque de toxicité par inhalation sur une échelle des classe aliant de A + (très faible émissions) à C (fortes émissions)





Low-emission

Sopro's commitment to sustainable, ecological construction practice is underlined by high-grade, low-emission products and its involvement in various projects. The formulation of our products is the most obvious starting point for an eco-friendly strategy: preference is given to raw materials that significantly reduce or completely eliminate emissions or pollution that pose a risk to humankind and the environment. Emission levels are indicated by the EMICODE° rating, based on the GEV (German Association for the Control of Emissions in Products for Flooring Installation, Adhesives and Building Materials) system. Sopro is an ordinary member of the GEV. Flooring installation products bearing the competition-neutral EMICODE® EC2, EC1 or EC1PLUS eco-label are solvent free and low-emission. Over a hundred Sopro products achieve the top EC1PLUS rating and are thus classed as "very-low-emission". The GEV system specifically focuses on measuring emissions of VOCs (volatile organic compounds), e.g. solvents or fuels. The EMICODE® label certifies that emissions from the tested products pose no risks after application. The certified products therefore offer maximum safety for human health through clean indoor air.

Regular random tests are performed by independent experts and duly qualified, neutral test institutes to verify compliance of the certified products with the relevant threshold values. As a Sopro customer, you can capitalize on our products to boost the health, environmental or indoor hygiene credentials of your new-build or modernization schemes.

Sopro offers emission-certified products in virtually all product groups – from primers, surface fillers, waterproofings, separating and insulation board to tile adhesives and grouts.

These issues also enjoy high priority in other countries, such as France – which is why we also have our products tested to the French VOC ordinance.

ECO-FRIENDLY

Eco-friendly

Sopro Bauchemie has, on its own initiative, undertaken to provide ecologically sound products and solutions backed up by efficient, economical processes. That eco-friendliness, economic viability and efficiency are by no means mutually exclusive is triumphantly demonstrated by our measures under the city of Wiesbaden's ÖKOPROFIT° initiative. Sopro Bauchemie has already picked up a string of "ÖKOPROFIT° company" awards while being a long-standing member of the city's "Ökoprofit Club" environmental initiative. The participants in this scheme to promote integrated environmental technology, launched in over 100 German municipalities and administrative districts, take action to reduce the burden on the environment while at the same time cutting costs. For years now, Sopro Bauchemie in Wiesbaden has embraced a host of measures that demonstrate how economic success can be achieved without in any way compromising the natural environment or future generations.

On the contrary, ecological initiatives and the sparing use of limited resources can even pave the way for cost savings. The programmes introduced in many different parts of the company have achieved **significant reductions in the volume of waste produced, together with appreciable cuts in energy, water and fuel consumption** – all of which have translated into considerable savings. The energy management system introduced by Sopro Bauchemie to boost energy efficiency has been **certified to DIN EN ISO 50 001** since 2014, thereby underlining the company's commitment to efficient and sustainable energy use. Its aim is to achieve a continuous and lasting optimization of energy consumption.

Active environmental and climate protection pays dividends:

- Sustainable energy management (reduced energy consumption)
- ✓ Optimization of material efficiency (reduced resource use)
- √ Reduced carbon emissions
- ✓ Systematic waste avoidance and sorting





Environmental product declarations (EPDs)

Sustainable construction trends have also driven the demand for environmental product declarations (EPDs) for building chemical products. In many building certification systems, the criteria for evaluating sustainability include a standardized, systematic life-cycle assessment (LCA), which – as the name suggests – covers a building's entire lifespan. The data used in these assessments are based on EPDs prepared in accordance with international standards ISO 14025 and EN 15804. EPDs contain statements on the energy and resource use as well as the extent to which a product contributes to the greenhouse effect, acidification, eutrophication, destruction of the ozone layer and smog formation. They also include details of the technical properties needed to assess the performance of a particular product in the building, e.g. in terms of service life or impact on indoor air quality.

With external support, the German Construction Chemicals Manufacturers' Association (DBC) has drawn up Model EPDs for the relevant product groups, which have been validated by the German Institute for Construction and the Environment (IBU). This enables DBC member companies, which include Sopro Bauchemie GmbH, to properly meet the demand for product EPDs. A guideline with points system can be used to verify whether a product meets the criteria of a Model EPD. Sopro has already carried out this allocation for numerous products and the resulting set of declarations of conformity are now available for downloading from the Internet. The relevant details are also included in the sustainability data sheets.









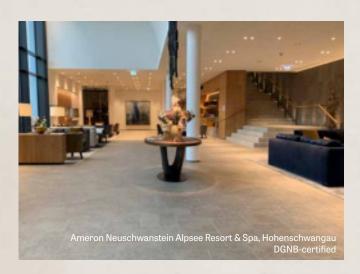
SUSTAINABLE BUILD AND REFURBISHMENT



Sopro references

Sopro is a unique company with a single-minded commitment to sustainable construction and refurbishment. Everything we do is shaped by this awareness of our responsibility. Our wide range of very-low-emission products has helped numerous sustainable, high-spec projects, such as the WINX Tower in Frankfurt/Main, to achieve DGNB certification. In the German city of Darmstadt, we are also a partner in the energy Home project for a low-emission house that generates more energy than it consumes!

Certification, expressed in terms of a "quality level", is based on the DGNB criterion "ENV1.2 Local Environmental Impact" (2015 version), with quality level 4 representing the highest standard. Each product, depending on its type, is allocated to a "line" in the relevant criteria matrix. All low-emission Sopro products are duly allocated to a DGNB quality level.









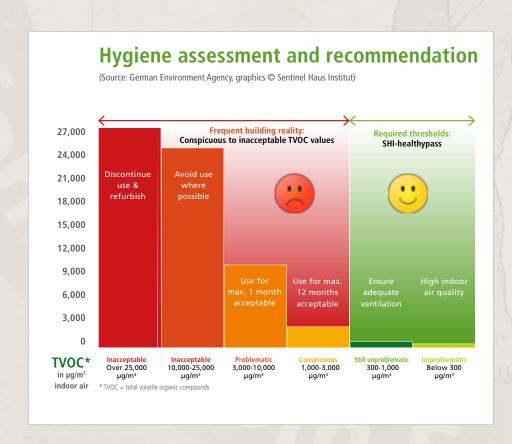
HEALTHY HOMES

Healthy living solutions with Sopro Bauchemie

As a rule, people spend more than 90% of the day indoors. All the more important, then, is a healthy indoor air quality.

Indoor air contaminants are normally invisible and may, to varying degrees, impair the health and well-being of the building occupants. Unpleasant odours in rooms, a feeling of discomfort and health complaints are among the common reasons for the performance of indoor air quality measurements in both private and public facilities. These frequently serve to determine the carbon dioxide and VOC levels.

VOC is the generic term for organic (i.e. carbon-containing) substances that are volatile, in other words can change into a gaseous state at normal temperatures. Preferably, the total of the VOC values in the indoor air should not exceed 1,000 μ g/m³. The effective quantity of these organic compounds that escape





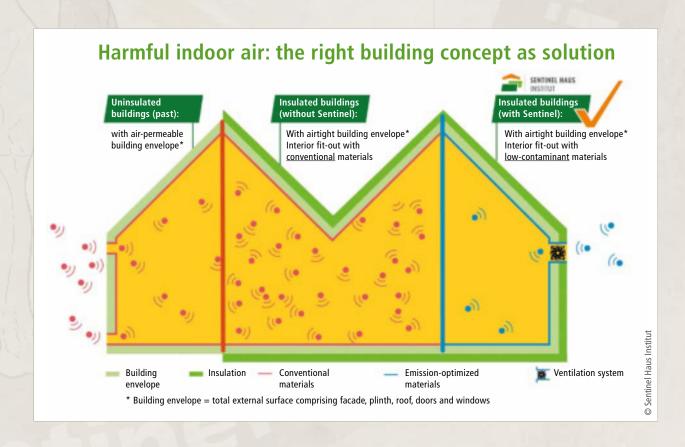
into the indoor air can be established by one of two methods – either by determining the VOC content in the raw products or by means of test chamber measurements. A large proportion of Sopro products **have been officially certified** on the basis of such investigations and tests.

Key to the design of healthy living environments, especially given the invisibility of air contaminants, is the specification of the right building chemical products. Healthy home construction is a topic of increasing priority among both public and private clients. The Sentinel Haus Institut supplies clients, architects and other designers with information on suitable low-contaminant construction products. Applying stringent criteria in terms of product contaminant content and emission behaviour, the independent institute maintains a list of healthy materials, above all for private residential construction.





Download Sopro Healthy Living **brochure**





CERTIFIED SOPRO PRODUCTS

Sopro's No.1 adhesive (400)

Sopro's No.1 Silver adhesive (403)

Sopro's No.1 rapid-set adhesive (404)

Sopro FKM 600 adhesive

Sopro FKM XL 444 adhesive

Sopro FS 15 550 floor-levelling compound

Sopro VF 419 adhesive

Sopro's No.1 white adhesive (996)

Sopro FF 450 adhesive

Sopro DF10 grout

Sopro Brillant® grout

Sopro Saphir® grout

Sopro FL plus grout

Sopro DFX grout

Sopro RAM 3 454 renovation & levelling mortar

Sopro OFS 543 floor-levelling compound

Sopro Racofix® 8700 anchoring mortar

Sopro Bauchemie has so far had 36 healthy home construction products **certified by the Sentinel Haus Institut**. These **healthy-living products** are signified by the Sopro healthy living button.

The eye-catching feature of this button is the so-called "Vitruvian man", as drawn by Leonardo da Vinci. Since Leonardo's time, it has not only served as an aesthetic symbol of ideal proportions, but has celebrated humankind as the ultimate measure of all things.

Further details on healthy home construction products are presented on **Sopro's healthy-living ZOOM** or in our website's healthy-living tab at https://www.sopro.com/de-de/unternehmen/wohngesundes-bauen/.





Download Sopro ZOOM
Healthy-Living Solutions

Sopro AEB 640 membrane Sopro AEB 641 sealing tape Sopro AEB 148 sealing tape Sopro AEB 643 ext. angle seal Sopro AEB 642 int. angle seal Sopro AEB plus 639 membrane Sopro AEB 644/645 wall/floor collar Sopro FDK 415 adhesive Sopro FDF 525/527 sealing compound Sopro DSF 623 sealing slurry Sopro TDS 823 sealing slurry Sopro WB 588 membrane Sopro Rapidur® FE 678 screed Sopro Rapidur® M5 screed mortar Sopro GD 749 primer Sopro HPS 673 bonding primer Sopro FDP 558 tile insulation board Sopro Marble Silicone



Low-emission tile adhesives



FKM® XL 444



Multi-purpose eXtraLight flexitile adhesive eXtraLight flexible



FKM® Silver 600



Silver multi-purpose flexible tile adhesive tile adhesive



Sopro's No.1 400





Sopro's No.1 rapid-set 404



Rapid-set flexible tile adhesive



Sopro's No.1 Silver 403



S1-grade flexible tile adhesive tile adhesive



Sopro's No.1 white 996





Flexible marble and mosaic adhesive 446





VarioFlex® Silver VF 419



Silver-grey, rapid-set, flexible tile adhesive



VarioFlex® HF® 420



VarioFlex® high-strength flexible tile adhesive



VarioFlex® XL 413



flexible tile adhesive



Flexible tile adhesive 450



Cementitious flexible tile adhesive,



Rapid-set flexible tile adhesive 451



cementitious tile adhesive



Classic plus 808



adhesive



Classic white 809



tile adhesive



Classic rapid-set 810





Medium-/thick-bed tile adhesive 888



Rapid-set, flexible medium- and thickbed tile adhesive



White medium-/thick-bed tile adhesive 885



White, rapid-set, medium- and thickbed tile adhesive



Thick-bed mortar with trass 858



回路計画 Hydraulically setting, trass-bearing, cementiti-ous adhesive



Medium-bed flexible tile adhesive with trass 414



Cementitious flexible mediumbed tile



Rapid-set medium-bed flexible tile adhesive 429



Rapid-set medi-um-bed flexible tile adhesive with trass tile adhesive with



PU adhesive 503



White, two-component, polyurethane reaction resin adhesive



Vinyl flooring adhesive 691



Easily workable ready-to-use adhesive

Low-emission sealants



Sanitary Silicone SSI



High-grade, elastic silicone sealant



Ceramic Silicone KSI



Elastic silicone sealant



Marble Silicone MSI



Elastic, neutralcuring silicone sealant



SoproDur® HF-D 817



High-strength sealant



Acrylic sealant 049



Gunnable, acrylic dispersion-based sealant



Polyurethane sealant 682



Highly elastic, rapidset polyurethane sealant

Low-emission tile grouts



DF10® Flexible designer tile grout



Strong, fine, flexible, rapid-set, cementitious tile grout



FL plus flexible tile grout



resistant, rapid-set, cementitious tile



FL Flexible tile grout



Flexible, waterrepellent, trassbearing, cementi-tious tile grout



TFb High-strength tile



High-strength, rapid-set, trassbearing, cementitious tile grout



TF+ High-strength tile grout



Brilliantly coloured, high-strength, rapid-set, cementitious tile grout



Sopro Saphir® 5



■ Water-repellent tile grout $1-\bar{5}$ mm



Sopro Brillant®



Water-repellent tile grout 1 – 10 mm



MFs Tile grout for narrow



Cementitious tile grout



MFs+b Tile grout for narrow and wide joints



tile grout 3-12 mm



MFb Tile grout for wide



Cementitious tile grout 5-20 mm



TNF Natural stone grout with trass



Rapid-set, trass-bearing, cementi tious paving grou bearing, cementitious paving grout 5-40 mm



DFX Designer epoxy tile



Fine two-component designer epoxy tile grout and adhesive, 1-10 mm



Low-emission primers



GD 749 Primer



Quick-drying, highly concentrated, solvent-free, synthetic resin primer



SG 602 Primer-sealer



Special, solventfree, one-component, synthetic resin primer



HPS 673 Bonding primer



Quick-drying, solvent-free, one-component, reaction resin primer



MGR 637 Multi-purpose



Quick-drying, solvent-free, reaction resin



EPG 1522 Epoxy primer



Low-emission, unpigmented, two-component liquid epoxy resin

Low-emission accessories



FDP 558 Tile insulation



Rotproof, resinbonded polyester fibreboard



TDP 565 Impact sound insulation board



■ LETE Pressed, resinbonded polyester fibreboard



TEB 664 Impact sound insulation/separating layer



■ ★★★ ■ Sound-insulating, separating, recycled granulated rubber sheet



WEV 579 Polyester nonwoven



Scrim-reinforced polyester nonwoven

Low-emission fillers | plasters/renders | universal adhesives



FS 15[®] plus 550



Universal self-levelling, rapid-set, cemenu tious surface filler rapid-set, cementi-



FS 5® 549



Self-levelling, rapid-set, cementitious cementitious surface filler



VS 582 Self-levelling filler



Self-levelling or mouldable, rapid-set, cementitious surface filler surface filler



HF-S 563 High-strength floorlevelling compound



Heavy-duty, cementitious floor-levelling compound



FAS 551 Fibre-reinforced selflevelling filler



Fibre-reinforced selflevelling fille selflevelling filler



FSH 561 Hybrid self-levelling filler



White, Hybrid self-levelling filler



OFS 543 Contract floorlevelling compound



Pumpable, self-levelling cementition self-levelling, cementitious surface filler



S-Flow 545



Universal floor-levelling compound



Classic 587



surface filler



DFS 965



Self-levelling designer floor



RAM 3® 454



Renovation and levelling mortar



SSP 465



Grinding filler for industrial application



434 RAP® 2





SBP 474



render



Racofix® 2000



Rapid-set anchoring



Racofix® 8700



Rapid-set anchoring mortar



Rapidur® 460



Rapid-set anchoring mortar



Low-emission screeds



Rapidur® B5 767





Rapidur® FEW 698



■ White self-levelling screed



Rapidur® FE 678



Self-levelling screed



Rapidur® M1 769



Rapid-set screed mortar



Rapidur® M5 747





Rapidur® M8 601





Shaken resin 649



Low-odour, rapid-set silicate resin



Rapidur® B1 turbo 760



Special, polymer-modified, ternary binder for cement screeds



Rapidur® B3 768



Special, polymer-modified, ternary binder for cement screeds binder for cement



Binder with trass 421



bearing, cementitious binder

Low-emission waterproofings



PU surface sealant 1570/1571



liquid polyurethane resin for waterproofing



Flexible RS sealing slurry 623



Reactive, sagresistant, onecomponent mineral sealing slurry



Two-component turbo sealing slurry 823



High-performance, rapid-set, twocomponent mineral sealing



One-component flexible sealing slurry 523



One-component mineral sealing



Flexible sealing compound 525



Highly elastic, ready-to-use, o ready-to-use, onecomponent liquid waterproof coating



Flexible sealing compound 527



Highly elastic, ready-to-use, onecomponent liquid waterproof coating



Waterproofing kit 630



System-tested waterproofing kit



Flexible sealing tape 524-30



Self-adhesive, nonwoven-backed sealing tape



Sealing tape 438



■ Highly elastic, nonwoven-backed sealing tape



Pre-folded sealing tape 638



Highly elastic, pre-folded, nonwoven-backed sealing tape



Sealing tape for internal/ external angles 014/015



Highly elastic, nonwoven-backed angle seal



Flexible sealing collar for walls 089



resistant sealing collar



AEB® waterproofing and separating membrane 640



Thin, crack-bridging waterproof sheet



AEB® sealing tape 641



fabric sealing tape



AEB® pre-folded flexible sealing tape 1176



flexible sealing tape,



AEB® flexible sealing tape 148



Extra-flexible sealing tape



AEB® sealing tape for internal/external angles 642/643



Preformed angle seals, faced either side with special nonwoven fabric



AEB® vertical make-up piece left/right 176/177



Preformed, flexible vertical make-up pieces





AEB® 3D wall collars 1172/1173



Special, innovative, three-dimensional wall collar



AEB® WC wall collar 1174



Special, innovative wall collar



AEB® waterproofing and separating membrane plus 639



Flexible sheet for use as reliable, flexible waterproof membrane



AEB® HD waterproofing and separating membrane 958



Extra-thin-sheet premium waterproofing and separating membrane



AEB® HD sealing tape 1161



Innovative premium sealing tape,



AEB® HD sealing tape for internal/external angles 1162/1163



Innovative premium sealing tape for angle



AEB® HD sealing collars 1164/1165



Innovative premium sealing . collar



Fixing and waterproofing adhesive 415



Roller- and brushapplied, twocomponent, mineral reactive adhesive



Racofix® WaterBlock 588



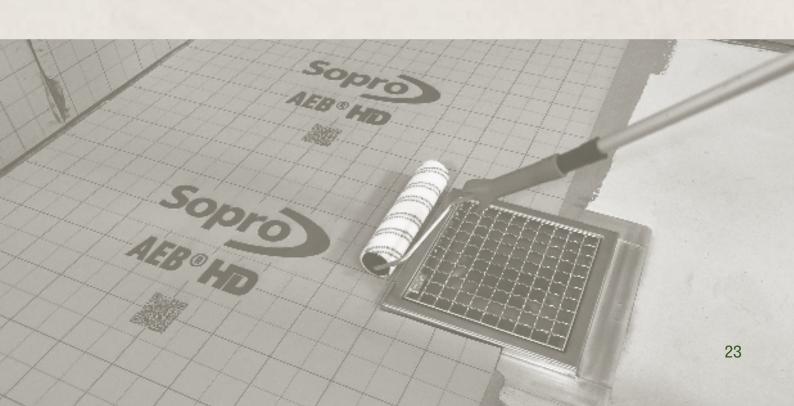
One-component hybrid waterproof membrane



Flexible sealing tape for building joints 524-35



Self-adhesive, nonwoven-backed sealing tape



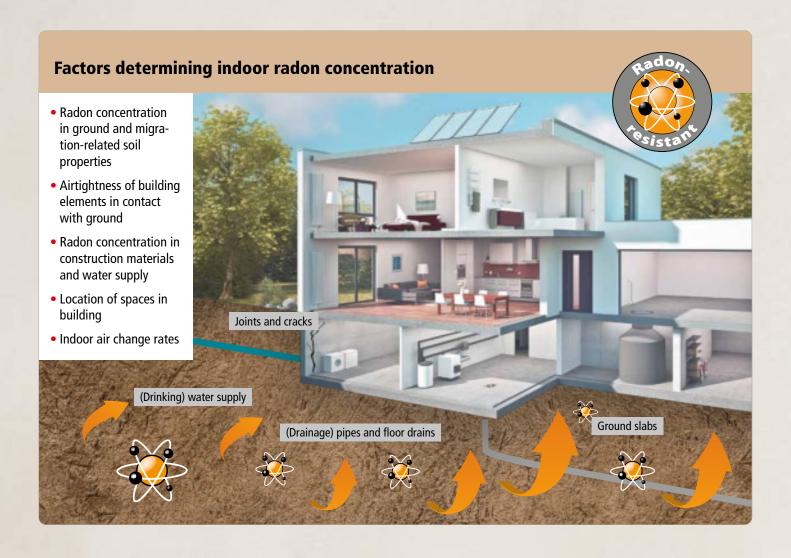
RADON-TIGHTNESS



Elevated concentrations of radon in indoor air – as a result of inadequate proofing that allows the inert gas to enter buildings – are classed as a health risk.

Given that the radioactive gas is a product of the radioactive decay of uranium, the more uranium contained in the soil, the greater its occurrence. Radon is extremely mobile and impossible to see, smell or taste.

As the gas builds up in the ground, it finds its way into buildings via leaks in the ground slab, joints and cracks in masonry, or pipe and cable penetrations. Temperature differences between indoor and outdoor air together with air movements create negative pressure conditions that cause radon-bearing soil air to be sucked in from a radius of up to 20 metres. Inadequately sealed cellar doors, for example, may then allow the radioactive gas to reach other parts of the building.



Sopro Bauchemie offers a range of products that act as a radon barrier.

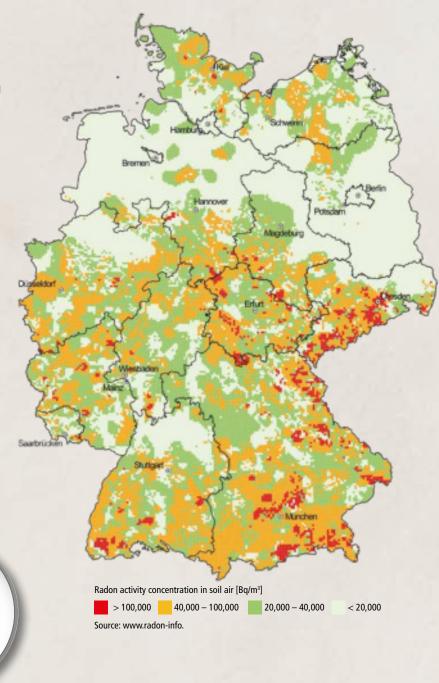


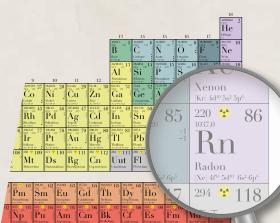
Further details are presented in our special brochure on the subject of radon-tightness.

Sopro products as radon barrier

DGNB: Top quality level 4, Line 25

- √ Sopro KSP 652 waterproof basement coating
- √ Sopro KD 752 waterproof basement coating
- √ Sopro KD 754 waterproof basement coating
- √ Sopro KMB 650 bitumen coating
- √ Sopro KMB 651 bitumen coating
- √ SoproThene® 878 sheet membrane
- √ Sopro ZR 618 membrane
- √ Sopro TDS 823 sealing slurry
- √ Sopro DSF 623 sealing slurry









INTERNATIONAL ENGAGEMENT

Sopro also recognizes its responsibilities at international level, not only in seeking solutions for eco-efficient products and production processes, but also in their single-minded implementation.

Sopro as member of Swiss Minergie® Association

The MINERGIE® system plays a major role in sustainability certification in Switzerland and parts of France – hence Sopro's membership of the associated organization. Minergie® targets rational energy consumption and the increased use of renewables. It thus sets out to make a collective contribution to reducing environmental pollution while at the same time improving quality of life and competitiveness.



Sopro products in line with French VOC ordinance

In France, Sopro products for diverse applications have been verified under the mandatory classification system for volatile organic compounds (VOC), effective since September 2012. Virtually all tested products achieved the top "A+ – very-low-emission" rating. This is certified by the VOC label, which is modelled on the energy efficiency classification system for electrical appliances. The four classes are: A+ (very-low-emission), A, B and C (high emissions).



* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présantant un risque de toxicité par inhalation sur une échelle des classe aliant de A+ (très faible émissions) à C (fortes émissions)





Chemistry to build on

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