RESIDENTIAL CONTRUCTION TRENDS IN THE UNITED STATES 2023

dwr REINFORCING AND STEEL SOLUTIONS

As residential construction continues to evolve and the construction industry undergoes new trends in the United States, reinforced concrete has emerged as a top choice for builders and contractors.

In this ebook, we will explore the numerous benefits of using reinforced concrete in construction.

Let's recall that in 2022 the activity of the construction industry got off to a good start, after posting 8% growth over 2021.

However, 2023 poses challenges such as rising costs, supply chain problems and a shortage of skilled labor to carry out projects using traditional methods.

Consequently, both the planning and execution of projects and the development of materials have had to adapt to the optimization needs and sustainability requirements that companies in the sector must meet to differentiate themselves and continue to grow.

RESIDENTIAL & COMMERCIAL CONSTRUCTION TRENDS

!!

While non-residential construction may be boosted by the Infrastructure Investment and Jobs Act, the outlook for housing construction is very different, given the context we have described.

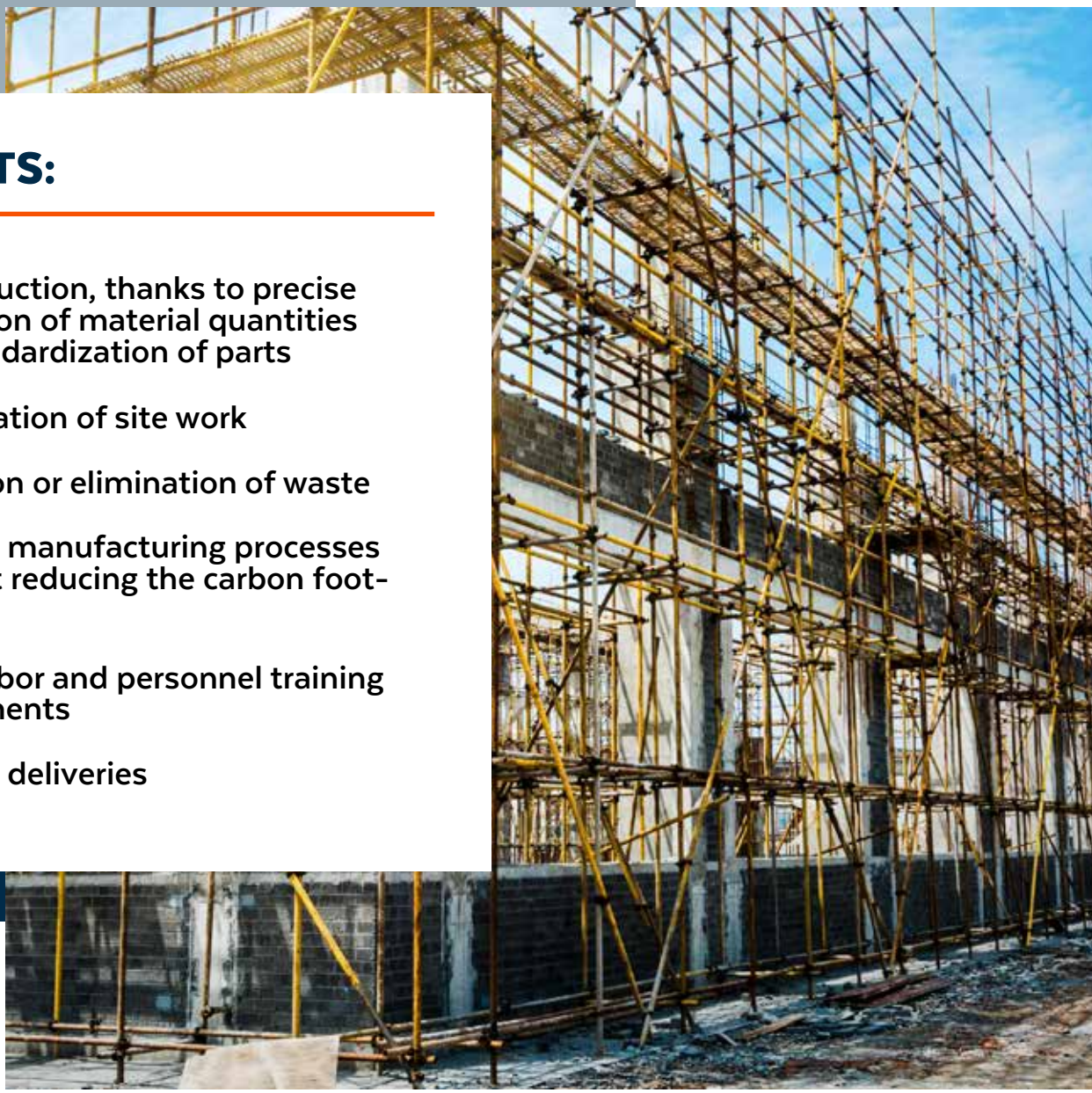
Needless to say, the trends in the industry respond to the search for solutions to the problems in each construction segment, so the most important changes or alternatives that we will see are the following:

1. MODULAR AND PREFABRICATED CONSTRUCTION

The use of prefabricated systems and materials for construction is based on the design of parts tailored to the project, which brings benefits such as:

BENEFITS:

- Cost reduction, thanks to precise calculation of material quantities and standardization of parts
- Optimization of site work
- Reduction or elimination of waste
- Certified manufacturing processes aimed at reducing the carbon foot-print
- Lower labor and personnel training requirements
- On-time deliveries



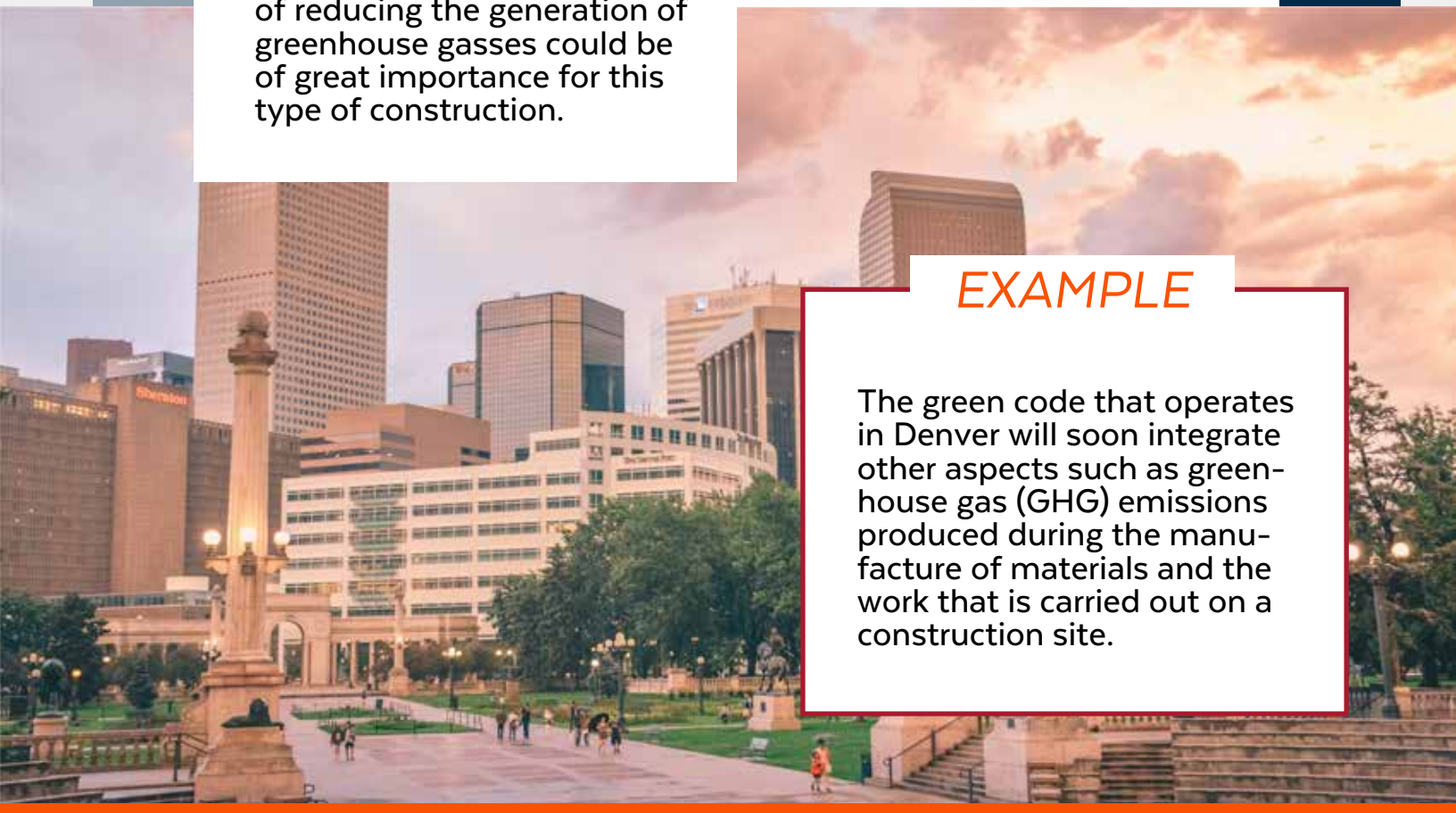
2. MULTIFAMILY HOUSING

While there is an expectation that multifamily housing — including apartments or condominiums — will remain strong in 2023 and later in the future, it is interesting to learn how the concept of multifamily housing has been rethought, for example, through mixed-use developments that are distinctive for offering a variety of amenities and services within an urban setting.

In relation to the above, it is estimated that the objective of reducing the generation of greenhouse gasses could be of great importance for this type of construction.

Historically, in some U.S. cities such as Denver, Boston and San Francisco, sustainability efforts have centered on the energy efficiency of buildings, that is, on managing the energy used for running artificial climates, lighting and hot water systems.

But many more actions can be implemented in the future to reduce the generation of emissions during the construction process.



EXAMPLE

The green code that operates in Denver will soon integrate other aspects such as greenhouse gas (GHG) emissions produced during the manufacture of materials and the work that is carried out on a construction site.

3. SUSTAINABLE VERTICAL CONSTRUCTION

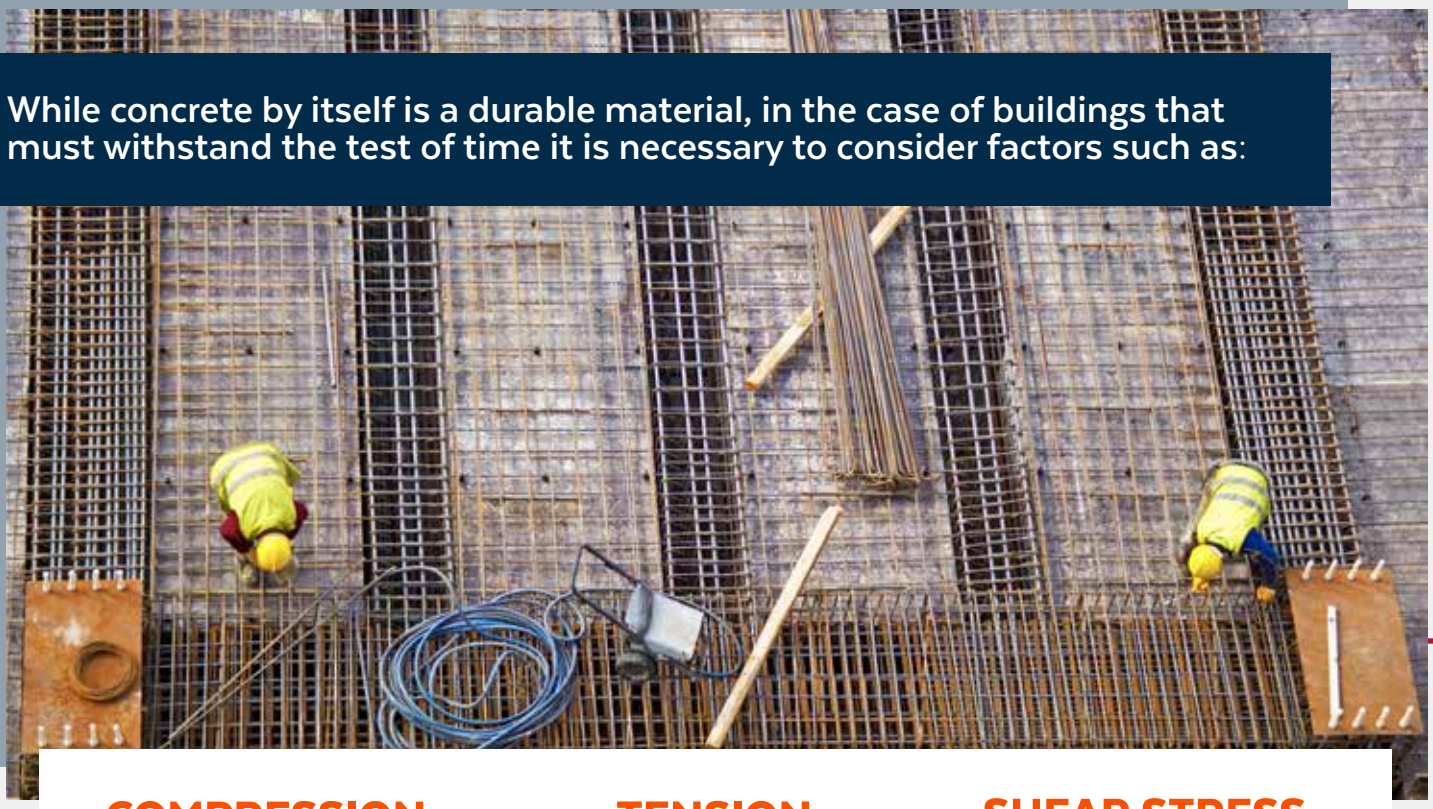
With growing concerns about climate change and environmental impact, sustainable vertical building practices are gaining more presence in the industry. This is seen in projects such as driveways, basements and pools.

In this type of construction, industrial production and construction work based on ESG (Environmental, Social and Governance) principles represent an added value for the customer in a market that is increasingly aware of the importance of reducing GHG (Greenhouse Gases) emissions in industrial processes, especially those carried out as part of the production chains in the construction industry.

The GHG emissions produced by manufacturing steel for the construction industry are estima-ted at 6.6% of the total emissions produced worldwide.

As a result, we expect to see this year formulated policies aiming to establish performance standards in construction and circular economy that include actions such as the recovery of materials prior to the demolition of buildings. The cities of Portland and Oregon City are playing a leading role in this matter.

However, modern concrete construction sites would be difficult to complete without sufficient structural reinforcement.



While concrete by itself is a durable material, in the case of buildings that must withstand the test of time it is necessary to consider factors such as:

COMPRESSION.

It occurs when concrete withstands large loads. That is why compressive strength is one of the main variables to take into account in the construction planning phase.

TENSION.

Tensile stress is the opposite of compression. It occurs when the slab begins to separate.

SHEAR STRESS.

It is a vertical force applied to the surface on which work is being done; it can be a column, beam or pillar.

In response to the need for reinforcing concrete structures, steel is a fitting material thanks to its versatility, durability and affordability. The strength of reinforced concrete is about 20 times higher than that of traditional concrete, which makes it greatly efficient when used for construction work.

There are countless applications for reinforced concrete in construction, with a wide variety of structures and components that can be customized to suit the needs of various industries. From specialized projects to simpler works, reinforced concrete has the potential to be a key component in a wide range of construction endeavors.

Building and Securing your Future.

We're dedicated to providing top-notch reinforcement solutions for your projects. With our commitment to using only the highest quality materials, you can trust that your project will be completed to the highest standards.

dwr REINFORCING AND STEEL SOLUTIONS®

1 (800) 867-6245
hello@mcswusa.com