

# HIGH PERFORMANCE CONCRETE WITH EXTENDED JOINTS

**752HP<sup>™</sup> FLOOR SYSTEM** 



## **TYPICAL APPLICATIONS**

- Warehouses
- Distribution Centers
- Manufacturing Plants
- Commercial and Retail Floors
- Recreational Facilities
- Food and Beverage Processing

#### **FEATURES & BENEFITS**

- Reduction of contraction joints
- More durable concrete
- Less maintenance
- Reduced construction time
- Lower cost of installation
- Specification direction
- Laboratory testing
- On-site field support

#### **GUIDES & STANDARDS**

- ACI 302
- ACI 360
- ASTM C78 and C1609
- ASTM C157 modified

### A PROPOSAL FOR ADVANCED FLOOR DESIGNS

**Euclid Chemical 752HP<sup>™</sup> Floor System** is a high flexural strength, low shrinkage, high performance, fiber-reinforced concrete floor designed to extend joint spacing, reduce curling and improve lifetime serviceability. This system is intended for interior industrial and commercial floors built in accordance with ACI 302 and 360.

#### THE OBJECTIVE AND THE GOAL

Euclid Chemical 752HP Floor System comprises the following components:

- 750 psi (5.2 MPa) flexural strength concrete mixture
- 0.02% concrete shrinkage
- 200 psi (1.4 MPa) post-crack residual strength (f<sub>e3</sub>)
- 50 ft (15 m) joint spacing (column line spacing)

#### **PRODUCTS**

The Euclid Chemical Company offers the following products to assist in the development and successful placement of the **Euclid Chemical 752HP Floor System:** 

- EUCON<sup>™</sup> high performance water-reducers and chemical admixtures
- PLASTOL<sup>™</sup> series of polycarboxylate chemical admixtures
- EUCON<sup>™</sup> SRA and CONEX<sup>®</sup> shrinkage reducing and compensating admixtures
- **TUF-STRAND<sup>™</sup> SF** macro-synthetic fibers
- EUCO<sup>®</sup> QWIKJOINT<sup>™</sup> joint fillers
- EUCO<sup>®</sup> DIAMOND HARD<sup>™</sup> surface densifier

#### **EXPERTISE, SERVICE AND EXPECTATIONS**

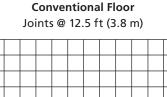
By utilizing the products, technical data, specifications, contractor relationships, and laboratories at Euclid Chemical, a successful low shrinkage, high performance, extended joint, fiber-reinforced concrete floor can be built that will provide the owner with lower maintenance and better durability over the expected lifetime.

### **GETTING STARTED**

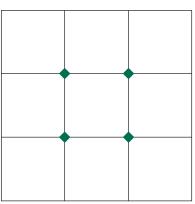
With advancements in concrete placement, reinforcing technologies, admixture capabilities and repair methods, concrete floor construction has evolved beyond traditional placement techniques. The **Euclid Chemical 752HP Floor System** and specification combines emerging technologies and provides guidance for topics such as extended joint spacing, low shrinkage, fiber-reinforcement, curing methods, decorative applications and troubleshooting problems.

#### **SPECIFICATIONS & RECOMMENDATIONS**

Subgrade	150 pci (0.041N/mm <sup>3</sup> ) at time of concrete placement
Curing	7 day wet
Isolation Joints	follow ACI guidelines
Saw Cutting	Minimum D/3: if necessary, immediate early entry, follow up at 4-6 hrs
Slip Sheets	10 mil min single sheet with taped overlaps
Joint Filling	> 120 days



Euclid Chemical 752HP Floor Joints @ 50 ft (15 m)



#### Reduction in lineal feet of joint up to 80%

#### **ALTERNATIVES**

The potential for extending joint spacing can depend on more than just the mix design and reinforcement. Proper subgrade preparation, placement conditions, saw cut depth, curing time, and exposure can all play a role in the overall floor lifetime serviceability. Alternative flexural strengths, fiber dosages, joint spacing, and chemical admixtures can all be used to construct durable high performance floors. It is highly recommended to conduct testing and verification prior to the construction of a floor project to ensure engineering and specification requirements are met.

For more than 100 years, The Euclid Chemical Company has served as a leading supplier to the concrete and masonry industry offering a full line of engineered concrete admixture and construction products. These products include concrete admixtures, block and masonry additives, curing and sealing compounds, epoxy adhesives, floor and wall coatings, structural grouts for columns, equipment and machinery, joint fillers and repair products. The Euclid Chemical Company strives to bring innovative technologies and products to the concrete market with industry-leading customer service.



