

Note to Specifier:

The **Admixture Systems** business of **BASF Corporation** previously conducted business as **Degussa Admixtures, Inc.** and **Master Builders, Inc.**

BASF has launched the **Master Builders Solutions** brand on January 1, 2014. Master Builders Solutions will be BASF's global brand for construction, combining the established strengths of the Master Builders legacy with BASF's other well-known construction product brands such as Chemrex, Sonneborn, MBT and others.

Please update your Master Specifications to reflect the product name changes. The old product names are provided in brackets and in red fonts in this Section for reference.

For a MS Word version of this specification section, please send an email to admixtures@basf.com

Green Sense[®] Concrete

An Environmentally-Preferable, Cost-Effective Concrete with Optimized Proportions and Containing Supplementary Cementitious Materials, Non-Cementitious Fillers, or Both

Division 03 - Concrete

THESE SPECIFICATIONS ARE INTENDED TO ASSIST DESIGN PROFESSIONALS IN MODIFYING STANDARD CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) 3-PART DIVISION 03 SPECIFICATIONS TO INCLUDE GREEN SENSE CONCRETE. GREEN SENSE CONCRETE IS A REVOLUTIONARY ADVANCED CONCRETE MIXTURE PROPORTIONING SERVICE FROM BASF THAT ACHIEVES NEW LEVELS OF PERFORMANCE, ECONOMICS AND SUSTAINABILITY.

THE FOLLOWING PARAGRAPHS ARE ADAPTABLE TO SPECIFICATION SECTIONS FOR CAST-IN-PLACE CONCRETE (SECTION 03 30 00), PRECAST CONCRETE (SECTION 03 40 00) OR SELF-CONSOLIDATING CONCRETE (SECTION 03 31 26). THE OUTLINE NUMBERING SYSTEM USED HEREIN IS NOT INTENDED TO COORDINATE WITH ANY PARTICULAR GUIDE SPECIFICATION SYSTEM. NUMBERS AND OUTLINE LEVELS SHOULD BE EDITED TO MATCH THE SPECIFICATIONS BEING USED.

INCLUDE THE FOLLOWING SUBPARAGRAPH UNDER THE ARTICLE DEFINITIONS IN PART 1

1.1 DEFINITIONS

- A. Green Sense Concrete: Green Sense Concrete is an environmentally preferable, cost effective concrete that is proportioned to meet or exceed performance targets using an optimization procedure from BASF Corporation – Admixture Systems, and materials that include supplementary cementitious materials, non-cementitious inert fillers, or both, BASF's MasterGlenium[®] (**Glenium**) high-range water-reducing admixtures and MasterSure[®] Z 60 (**RheoTEC Z-60**) workability-retaining admixture.

INCLUDE THE FOLLOWING SUBPARAGRAPH UNDER THE ARTICLE SUBMITTALS IN PART 1

1.1 SUBMITTALS

A. Green Sense Concrete as proportioned by BASF Corporation - Admixture Systems Phone: (800) 626-6260.

1. In addition to documents listed above, an environmental assessment report for the concrete mixture shall be submitted. The environmental assessment shall compare the submitted concrete mixture to a conventional/typical reference concrete mixture that would otherwise be used to achieve the specified performance. The assessment at a minimum shall include information in the following environmental impact areas: consumption of energy, emissions, toxicity potential, risk potential, consumption of raw materials, and land use. The methodology used to conduct the analysis and assessment shall be in accordance with ISO 14040 and ISO 14044 (ecological part) and shall be third-party-validated by NSF International, or other accredited agency that provides third-party assessment services.

INCLUDE THE FOLLOWING SUBPARAGRAPHS UNDER THE ARTICLE ADMIXTURES IN PART 2

2.1 MATERIALS

A. Admixtures: Furnish from one manufacturer.

1. Characteristics: Compatible with each other and free of intentionally-added chlorides.
2. High-Range Water-Reducing Admixture:
 - a. Shall conform to ASTM C 494/C 494M Type F.
 - b. Products and Manufacturers:
"MasterGlenium" (**Glenium**) Series by BASF Corporation - Admixture Systems
3. Workability-Retaining Admixture:
 - a. Shall retain concrete workability without affecting time of setting or early-age strength development.
 - b. Shall conform to ASTM C 494/C 494M Type S.
 - c. Products and Manufacturers:
MasterSure Z 60 (**RheoTEC Z-60**) by BASF Corporation - Admixture Systems

INCLUDE THE FOLLOWING SUBPARAGRAPH UNDER THE ARTICLE PROPORTIONING CONCRETE MIXTURES IN PART 2

2.2 PROPORTIONING CONCRETE MIXTURES

A. Concrete shall be proportioned in accordance with BASF Corporation – Admixture Systems' Green Sense Concrete mixture optimization procedure.

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